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REPORT
ON THE
SANITARY CONDITION
OF THE
County Borough
OF
Birkenhead,
FOR THE YEAR 1899,

BY

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BIRKENHEAD:

WILSON & JONES, PRINTERS AND STATIONERS, 70 ARGYLE STREET.

1900.

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OF THE
BIRKENHEAD TOWN COUNCIL,
1899-1900.

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MR. COUNCILLOR GODFREY ALLAN SOLLY.

AND
HIS WORSHIP THE MAYOR
(JAMES GAMLIN, Esq.)

Day of Meeting every alternate Tuesday at 4-30 p.m.

*Members of the Health Sub-Committee.

†Members of the Hospital Sub-Committee.

OFFICIALS
OF THE
PUBLIC HEALTH DEPARTMENT,
1899.

Medical Officer of Health.

R. SYDNEY MARSDEN, D.Sc., M.B., MAST. SURG., DIP. PUB. HLTH.,
F.R.S. AND F.R.P.S., EDIN., F. INST. CHEM., &c.

Borough Analyst.

J. CARTER BELL, ASSOC. ROY. SCH. MINES., F. INST. CHEM., F.C.S., &c.

Chief Inspector and Inspector under the Food and Drugs Act.

*WILLIAM DAWSON, ASSOC. SAN. INST.

Chief Clerk.

EDWARD H. CARTER.

Junior Clerks.

WILLIAM RILEY. JOSEPH BENNETT.

Inspector of Meat, Fish, and Slaughter Houses.

*JOHN M. CARNIE.

District Sanitary Inspectors.

*WILLIAM FITZGERALD. *JOHN LEE. *H. T. TAYLOR.

*W. H. TILSTON.

Inspector of Workshops and Bakehouses.

HENRY MOUNTFIELD.

Inspector of Back Passages and Ashpits.

*ALBERT BILLINGHAME.

Inspector of Common Lodging Houses and Houses let in Lodgings.

WILLIAM SCOTT.

Disinfecting Inspector.

ISAAC TAYLOR.

Keeper of Disinfecting House.

JOHN NOBES.

Disinfecting Labourers.

ROBERT NIELD.

JOHN JACKMAN.

Those marked thus * have passed the examination of the Sanitary Institute
or the Scottish Sanitary Institute.

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*To the Mayor, Aldermen, and Council of the
County Borough of Birkenhead.*

GENTLEMEN,

In accordance with the duty which annually devolves upon me, I have the honour of submitting to you my Eighth Report to the Health Committee on the Health of Birkenhead, viz., that for the year 1899.

The Report will be found to contain a detailed account of the work done by the Public Health Department during the year under review, and I trust it may meet with the same favourable reception which has always been given on previous occasions.

I have the honour to be, Gentlemen,

Your obedient servant,

R. SYDNEY MARSDEN,

MEDICAL OFFICER OF HEALTH.

PUBLIC HEALTH DEPARTMENT,

TOWN HALL, BIRKENHEAD,

10TH APRIL, 1900.

COUNTY BOROUGH OF BIRKENHEAD

DURING 1899.

SHORT SUMMARY.

Area in Acres ...	3,850, or a little more than 6 square miles.
No. of Inhabited Houses, Dec. 31st	20,632
Population (at Midsummer)	114,376
Rateable Value	£537,316
1d. in the £ yields for General Purposes... ..	£2,175
1d. in the £ yields for Sanitary Purposes	£2,025
Number of Persons per Acre (Density of Population) ...	29·70
Birth Rate per 1,000 living	31·73
Death Rate do.	19·35
Zymotic Death Rate do.	2·86
Deaths of Children under 1 year of age to 1,000 Births	185
Percentage of Uncertified Deaths... ..	0 67
Percentage of Children successfully vaccinated	84·33

THE SANITARY CONDITION
OF THE
COUNTY BOROUGH OF BIRKENHEAD
DURING 1899.

*Report of the Medical Officer of Health to the
Health Committee.*

In presenting my Eighth Annual Report on the Sanitary Condition of Birkenhead, which deals with the year 1899, I regret that I am unable to give so favourable an account of the public health as it was my privilege to do last year, the death-rate having increased from 17·5 in 1898 to 19·3 in 1899. There seems, however, to have been no *special* cause for this increase, but a slightly greater fatality amongst all classes of disease during the year; and this has been general in its distribution throughout the country, the average death-rate of the thirty-three principal towns having also advanced from 19·0 in 1898 to 20·2 in 1899. It will be seen therefore, that in spite of the advance above indicated, our death-rate compares favourably with those of the other large towns.

In writing my successive Annual Reports it has been my custom to draw attention to such injurious conditions as existed from time to time, and which seemed to me to require the special

attention of the Committee; and also as to such steps as have been taken for their improvement. I do not propose to repeat these in my present Report, as what I said on the subject last year still holds good.

In the succeeding pages will be found details of the work carried on by the Public Health Department, together with the vital and mortal statistics of the Borough during the year under consideration, as follows:—

THE WORK OF THE PUBLIC HEALTH DEPARTMENT DURING 1899.

Ordinary Sanitary Operations.—The ordinary sanitary operations of the Department have continued to receive unremitting attention. House-to-house inspections of the cottage property in the Borough have been regularly made. Gulleys and passage drains have been periodically cleansed, public fountains, &c., have been scoured and kept in order, and the systematic removal of ashpit refuse at stated intervals has been carefully superintended.

Summary of Nuisances, &c.—The summary of nuisances investigated and dealt with during 1899 is as follows:—

	1899.
Number of nuisances reported	6383
Number abated without formal notice	602
Number of formal notices given	5781
Number abated after formal notice and without proceedings	5771
Number of cases in which proceedings were taken for ordinary nuisances	10
Number abated after proceedings... ..	10
Number of cases in which summonses were issued for non-payment of disinfecting expenses.	
Amounts and costs received in each case ...	1

Number of cases in which proceedings were taken for keeping a common lodging house in an improper manner, in accordance with Bye-Law 8	0
House disinfecting notices... ..	1737
Under Infectious Diseases (Prevention) Act ...	1250
Nuisances at houses let in lodgings	40
Nuisances at common lodging houses	3
Notices for cleansing of filthy house	25

A brief statement of the other measures taken in 1899 for correcting or getting rid of whatever appeared to be prejudicial to health is subjoined.

Sanitary defects reported by the Inspectors and referred for the action of the Borough Surveyor	450
Houses or parts of houses specially disinfected by sulphurous acid or other disinfectants ...	2111
Notice to whitewash and efficiently cleanse milk- houses, cowsheds and dairies, given and complied with	325
Offensive privies ordered for conversion into water- closets	150
Parcels of infected bedding and clothes disinfected at the Disinfecting House	363
Parcels of infected or discarded bedding and clothes destroyed	298
Carcases of dogs and cats &c. removed from pools or waste land and buried	152
Deposits of putrid fish and other objectionable refuse removed	9
Total	<hr/> 3858 <hr/>

In addition to the above,

377 excavations were made for the purpose of testing the condition of house drains.

276 smoke tests were applied to drains of premises reconstructed under the supervision of this Department.

62 water tests were applied to drains.

399 smoke tests were applied to the drains of new buildings, in conjunction with the Borough Surveyor's Department.

14 library books were taken and destroyed from houses where infective diseases had been notified to exist.

It will be seen from the above that the Department is kept well at work, and there is a very large increase in the work to be performed, this is in part due to the new Acts of Parliament which have come into force since 1st January, 1892, to the ever-increasing population and consequent greater crowding, and also on account of the more thorough manner in which examinations are now made. The latter tends to the advantage of the public, both as regards health and comfort, and every effort is made to keep down public or private nuisances dangerous to the community.

District Inspections.—The following is a statement of the work done by the District Inspectors of Nuisances and the Disinfecting Inspector during 1899.

			Number of Visits and Revisits made to Insanitary Property.
District I.—Inspector Fitzgerald	...	...	5199
„ II.— „ Lee	...	...	3586
„ III.— „ H. T. Taylor	...	...	3760
„ IV.— „ W. H. Tilston	...	...	3867
Disinfecting Inspector Isaac Taylor	...	...	8712
Total	...	...	<u>25124</u>

Smoke Nuisances.—Sixteen observations were taken of the smoke emitted from the factory and other chimneys of the Borough during the year 1899.

In five cases the Health Committee felt called upon to prosecute the offenders against the Acts, and in all of these cases penalties and costs were imposed by the magistrates.

The reduction of the smoke nuisance is one which is very carefully watched by the Inspectors, and much benefit has resulted in the past by their vigilance in this matter.

Inspection of Common Lodging Houses and Houses let in Lodgings.

The following is a statement of the work performed during the year 1899 by the Inspector of Common Lodging Houses and Houses let in Lodgings, viz:—

REGISTERED COMMON LODGING HOUSES.

Day Inspections	...	...	...	...	...	757
Night Inspections	..	...	...	...	...	99

There has been one addition to the register during the year, and at present the total number of registered lodging houses is eleven.

REGISTERED HOUSES LET IN LODGINGS.

Day Inspections	...	...	...	...	...	4229
Night Inspections	...	...	...	...	...	9

Fourteen additional houses were put on the register after being properly measured up, and duly certified as fit for the purpose. The total number of houses let in lodgings on the register at the end of 1899 was 576.

Overcrowding and Cellar-occupation.—Though the repression of overcrowding and cellar-occupation presents exceptional difficulties, much has been accomplished in the past year. Four cellar dwellings were reported by the Inspector, and in every case suppressed.

FACTORY AND WORKSHOP ACTS,
1878 to 1891.

In connection with the carrying out of the provisions of these Acts, the following is a statement of the work done by the Inspector during the year, viz:—

1476 visits have been made to workshops.

480 visits have been made to bakehouses.

37 workshops, including 2 bakehouses, have been placed on the register during the year, making a total of 674 up to the end of 1899, of which 77 are bakehouses and 33 are confectioners' shops.

20 workshops have been closed.

26 workshops have been transferred to more suitable premises.

372 nuisances in connection with workshops have been reported and abated.

61 notices have been served for the abatement of nuisance arising out of defective drainage, and 12 for inefficient ventilation.

80 notices to cleanse and limewash the workshops have been served and complied with.

45 occupiers of workshops have limewashed their premises under inspection, but without waiting for the formal notice.

2 underground bakehouses have been altered and reconstructed so as to improve the sanitary arrangements.

1 case of overcrowding has been reported and stopped.

30 new workshops and removals have been notified to H.M. Inspector of Factories as referred to in section 3, sub-section 3, of the Act.

7 workshops have been provided with w.c. accommodation, where none previously existed.

Lists of out-workers have been carefully kept, and notices in the form prescribed by the Secretary of State, as given in my Report for 1892 (pp. 57 and 58) have been served when necessary.

Bakehouses.—The duties involved in carrying out the provisions of the Acts relating to the sanitary condition of bakehouses have been put under a special Inspector, and during the year 480 visits have been made to bakehouses, and very special attention has been paid to the keeping of the bakehouses in a clean and healthy state, free from all effluvia from drains, privies, and other nuisances. Many sanitary defects have been discovered and remedied. Great attention has also been paid to see that a proper water supply is provided for each bakehouse, and that efficient ventilation can be secured; whilst regular limewashing has been required and enforced in every case.

There has been a very great improvement secured by this systematic inspection.

“Shop Hours Act, 1892.”

In carrying out the provisions of this Act the Inspector has paid 600 visits to different shops, and the occupiers' names and addresses have been placed upon a register specially kept for the purpose, together with the date of his visits.

The Hours of Barmaids.

The Shop Hours Act gives power to the Sanitary Authorities to restrict the hours of barmaids also to 74 hours per week. In some hotels, as I have remarked in former years, these girls are required to follow their occupation for upwards of 100 hours a

week, which is altogether too long. I would again call attention to the fact that I consider it desirable that the benefits of the Act should be extended to these girls, and recommend the matter to the serious consideration of the Authority.

Laundries.

130 visits were made during the year to the 19 laundries at present on the register.

Ashpits, &c.—A good deal of interest has been taken in this subject during the year, and I may remind you that the question as to the number of privies and compound middens in the Borough was carefully gone into in 1893, and it was then estimated that at Midsummer of that year the approximate number still in existence within the Borough was about 2721.

The Health Committee has been dealing with these middens year after year as opportunities have arisen, and during the past year 150 have been converted into water-closets and dry ashpits, properly covered in and ventilated, and provided with efficient doors and fastenings.

Since the above number of 2721 compound middens was estimated, there have been 2139 conversions ordered; thus leaving a balance of 582 remaining to be dealt with at the end of the year. But in addition to those abolished under notice a large number have been done away with by the owners themselves, and I estimate that not more than 400 privies now remain.

Public Urinals.—From time to time I have called the attention of the Committee to the insufficient accommodation in the form of public urinals which is provided in the Borough; and which leads to the objectionable use of many passages and other places for such purposes, creating thereby a serious nuisance and a number of insanitary spots which ought not to exist if the subject was properly grappled with. I can only again repeat the statement so that the matter may not be lost sight of.

I am glad to say that some effort has been made to provide these conveniences during the year, but considerably more will have to be done in this direction before the town is at all adequately provided for.

Open Sewer-Ventilators in the Road.

During the year 1899 the number of complaints received regarding nuisances arising from the effluvia from the "sewer-ventilators," which form a direct communication between the public sewers and the streets, has again been very large.

A special Committee has now been appointed to consider the subject, but up to the end of the year it had made no report, so I make no comments except to repeat that I am still of the same opinion as expressed in my last annual report, viz., that surface grids are a distinct nuisance.

Water Supply.

It is important for the health and well-being of the community that a proper and full supply of water should be obtainable. The water supply of Birkenhead is obtained from deep wells sunk in the new red sandstone, the water-bearing stratum being covered by an impermiablo bed of clay varying from about 2-ft. 6in. to 60-feet in thickness. The water is pure, as pumped, according to the analyst's reports. No form of filtration is used. The supply is constant, and there has been no change in the supply or the quality of the water since its inauguration.

It will be seen by referring to the following table that at the present time the average supply, per head, per day is no less than eighteen gallons, a very satisfactory amount.

The quality of the water supplied is also excellent, and is obtained from the new red sandstone at three different pumping stations from an average depth of 207 feet.

I am indebted to the Water Engineer (Mr. W. A. Richardson, C.E.) for the following table of extracts from his Annual Reports,

showing at a glance the amount of water delivered in the townships of Birkenhead, Claughton, and Tranmere, for various purposes, for the year ending March 25th, 1899.

	Sewer Flushing	Street Watering	Trade per Meter	Work- shops	Water for domestic use	Estimated population of Birken- head, Claughton and Tranmere townships	Average rate per head per day of popula- tion for domestic purposes	Average rate per head per day of popula- tion for domestic use, allowing 5% for slip of pump
YEAR	Gallons	Gallons	Gallons	Gallons	Gallons		Gallons	Gallons
1899	7732960	11056400	277313450	500500	700618694	105923	18.12	17.22

The Statistics for the years 1885 to 1898 were given in my Report for 1898.

Seizure and Destruction of Unwholesome Meat, Fish, and Vegetables.

The Meat and Food Inspector (Mr. John M. Carnie) has furnished the following particulars of meat, &c., unfit for human food, seized and destroyed during 1899.

The total weight of the meat taken amounted to 299,275 lbs., but of this a large proportion was voluntarily surrendered by the butchers, they having called the Inspector's attention to it.

As in all recent years, a considerable proportion of the meat taken was on premises in connection with the Foreign Animals Wharf, Woodside; and of 1254 calves taken many were newly born animals, or calves taken away after the slaughter of the mother from cows landed at Woodside. The total number of oxen killed at Woodside and inspected by us during 1899 was 193,770, and of sheep five, but a very large number of sheep were killed at Wallasey, within our jurisdiction, of which I have no return. At the Abattoirs in New Chester Road there were killed 760 beasts, 10,554 sheep and lambs, 460 calves, and 4593 pigs.

Tuberculosis.—During the year $36\frac{1}{2}$ carcasses of beasts, weighing 27,864 lbs., 15 carcasses of pigs, weighing 2,455 lbs., and 9,945 lbs of offal were destroyed through being affected with tuberculosis; the total amount weighing 40,124 lbs.

The following tables having reference to the subject of tuberculosis are continued.

Tranmere Abattoirs.

Year.	Number of Cattle Slaughtered.	Number affected with Tuberculosis.	Number of Cows affected.
1892	809	33	30
1893	404	8	8
1894	443	10	9
1895	757	15	12
1896	685	5	5
1897	557	11	9
1898	632	13	5
1899	760	33	3

Tranmere Abattoirs.

Year.	Estimated Number of Cattle slaughtered from Cheshire and Wales.	Number affected with Tuberculosis.
1892	409	33
1893	300	8
1894	243	10
1895	357	15
1896	285	5
1897	333	11
1898	350	17
1899	360	3

At the Abattoirs there were 4,593 pigs killed, 15 of which were affected with tuberculosis, 9 of these coming from Cheshire, 1 out of Wales. In the case of sheep, but very few are affected; thus in 1899 there were 10,554 sheep and lambs killed, not one of which was affected with tuberculosis; there were also 460 calves slaughtered.

Woodside and Wallasey Lairages.

Year.	Number of Cattle Inspected by us.	Number affected with Tuberculosis.	Number of Carcasses taken for Tuberculosis.	Number of cases where only the offal or other parts were taken.
1894	202,047	4	2	2
1895	178,798	11	7	4
1896	223,014	53	12	41
1897	211,717	113	26	87
1898	204,892	258	49	209
1899	193,770	230	13	87

**Proceedings taken under the "Sale of Food and Drugs Acts,
1875 and 1879, and Margarine Act, 1887."**

The Chief Inspector of Nuisances (Mr. William Dawson) gives the following summary of proceedings taken under these Acts during 1899.

The total number of samples taken during the year was 87, viz.—Butter 24, Cheese 6, Coffee 7, Lard 14, Milk 31, Mustard 7, and Vinegar 1.

Out of the above, 5 samples of Milk were reported adulterated by the Public Analyst, and proceedings were taken in respect of each case, the results of which are as follows, viz.—

Quarter Ending	No.	Article.	Amount of Adulteration.	Penalty imposed excluding Costs.
1899.				£ s. d.
March 31	262	Milk ..	7 per cent. of water ..	5 0 0
Decem. 31	303	Milk ..	5 per cent. of water ..	0 1 0
" 31	312	Milk ..	17 per cent. of water ..	1 3 0
" 31	316	Milk ..	23 per cent. of water ..	8 12 0
" 31	317	Milk ..	14 per cent. of water ..	5 0 0

The Milkhouses.—The regulation of dairies, cowsheds, and milk-shops, and the supervision of milk-sellers, has had systematic attention for a number of years. Special care is taken that the ventilation, lighting, cleansing, draining, and water supply of premises used for milk-trade are thoroughly efficient. Towards the close of the year 1888, new regulations for the more efficient control of the trade were drafted, and these were approved and made by the Town Council, acting as the Local Authority for the Borough, on January 2nd, 1889. A copy of these regulations was appended to the Report for 1888, and printed copies are supplied free to dairymen, milk-shop keepers, &c. The register of milk-sellers is revised week by week. The total number of milk-shops is 166, in addition there are 21 cowsheds, and 45 farmers resident outside the Borough, registered to purvey milk inside the Borough.

Twice every year notice is sent to all the milk-sellers requiring that the walls and ceilings of every room in the occupation of Registered Milk-sellers, used for storage or sale of milk, shall be limo-washed twice every year, that is to say, in March and September; but if the walls are painted, then they must be washed and thoroughly cleansed twice every year, in March and September.

Meteorological Results.

By way of introduction to the remarks it is proposed to make on the noteworthy features of the meteorology of the year, the following tabular statement is submitted of the mean temperature and atmospheric pressure, and the amount of rainfall in each month of 1899. It has kindly been prepared by W. E. Plummer, Esq., M.A., F.R.A.S., Director of the Observatory, Bidston Hill, Birkenhead, who also furnishes particulars weekly of the daily observations taken under his directions, from which Table IV. in the appendix is compiled, and also the information on which the remarks with reference to meteorological conditions and epidemics are based.

1899				Mean Tempera- ture	Mean Barometer	Rainfall 1 ft. above ground
				o	Inches	Inches
January	..	..	..	41.0	29.742	2.926
February	..	..	..	41.1	29.821	1.459
March	..	..	..	42.9	30.047	1.110
April	..	..	..	46.4	29.781	2.258
May	..	..	..	50.2	30.006	2.206
June	..	..	..	59.5	30.068	2.993
July	..	..	..	61.2	30.068	2.225
August	..	..	..	63.7	30.080	2.200
September	..	..	..	55.7	29.808	3.433
October	..	..	..	49.5	30.019	2.917
November	..	..	..	48.8	30.085	1.086
December	..	..	..	36.7	29.854	2.934

The meteorological results show as follows:—

Barometer.—The mean barometer of 1899 (29.953 inches) was higher than in recent years. The monthly mean was high in January, July and September. It was low in February, April, May and October. The highest reading during the year was on the 15th of January, when 30.60 inches was reached. The lowest barometer touched was 28.76 on November 25th.

Temperature.—The mean Temperature in 1899 was 50·33 degrees F., about the mean yearly temperature in the locality. The severest weather was experienced in the first quarter and last month of the year. There was freezing, more or less, on seven days in January, twelve days in February, and ten days in March, and on two days in November, and fifteen in December, the temperature being very low during the whole of this month. The lowest temperature reached at any time during 1899 was 20·6 degrees F. on December 13th and 14th. The highest temperature reached was 85·0 degrees F. on the 24th of August.

Rainfall.—The rainfall in 1899 (27·713 inches) was higher than last year, and above the average. The number of hours at which rain fell during the year was 695 as compared with 678 last year, which is about the yearly average. The heaviest fall on any single day was on August 28th (0·962 inches).

Wind.—The average wind force in 1899 was at a rate of 15·81 miles an hour, somewhat lower than last year, but about the local average. The most rapid motion of air during any single hour of the year was on January 12th—on this day the rate of wind per hour was from 14 miles to 83 miles. The rate for the whole twenty-four hours of the day was 1,138 miles, a very exceptional rate, and a storm of some severity, giving a mean hourly motion of air of 47·4 miles. There were seven hours in the year in which there was no wind—these calm hours occurred on February 24th, June 12th, July 5th and 31st, August 2nd and 23rd; 58·16 per cent. of the winds were westerly, including due south, a percentage about the average.

Humidity of the Air.—The mean difference between the wet and dry bulb of the thermometer in 1899 was 49·80, about the average.

Cloud.—The proportion of cloud to clear sky is estimated twice daily. In 1899 the proportion was 64·99 per cent. This percentage is less than the mean proportion.

Relative Mortality of different portions of the year.—The year's meteorology naturally introduces the next subject to be considered, viz.:—the distribution of the mortality over the four quarters, as the relative mortality of different portions of the year must necessarily be affected by the atmospheric conditions which have marked its progress. Of the sum of the deaths registered in Birkenhead and Claughton, 362 were entered to the first quarter, 292 to the second, 368 to the third, and 316 to the fourth; of the sum of the deaths in Tranmere and Oxtan, 178 appear in the first quarter, 129 in the second, 160 in the third, and 161 in the fourth. In Bebington the numbers of deaths registered in the four quarters were respectively 14, 4, 8, and 11; and in the Union Hospital and Workhouse the numbers 57, 51, 46, and 57. Expressed in death rates per thousand living, the mortality of the whole Borough in 1899 was 21·3 in the first quarter, 16·6 in the second quarter, 20·3 in the third quarter, and 19·06 in the fourth quarter.

The connection between Meteorological Conditions and Epidemics.—In endeavouring to trace any connection between Meteorological Conditions and Epidemics, it is obvious that there are only two circumstances likely to have any effect. First, temperature, and secondly, rainfall or humidity; and with regard to the first, since the temperature curve will always have a maximum in the summer, and a minimum in the winter, it seems more important to consider the *variations of temperature from the normal condition* than the absolute temperature itself. Exceptional circumstances cannot be explained by ordinary phenomena, and the weekly variations of both temperature and rainfall, from the regular amounts have therefore been tabulated. These variations are set down in the following table.

Weekly Return of Cases of Scarlet Fever, Measles, Typhoid,
and Diphtheria notified during 1899, and the weekly
variations of Temperature and Rainfall.

No. of week since Jan. 1st, 1899	Excess of rain in inches	Excess of temp. in degrees F.	Number of cases of scarlatina reported	No. of cases of measles reported	No. of cases of typhoid reported	No. of cases of diphtheria reported
1	in. —'06	° +1'4	2	1	0	5
2	—'11	+4'2	4	7	9	1
3	+ '92	+6'6	3	9	5	1
4	+ '88	—2'1	6	3	6	8
5	—'29	—5'0	4	3	1	5
6	+ '41	+1'6	0	3	3	0
7	+ '07	+3'3	6	4	3	5
8	—'39	—0'1	6	4	2	4
9	—'39	—1'4	4	11	1	3
10	+ '01	—0'8	11	10	1	4
11	—'42	+5'4	5	17	6	1
12	—'29	—7'5	5	7	3	1
13	+ '17	+4'9	12	1	2	3
14	+ '02	+3'8	3	8	2	1
15	+ '61	—2'8	4	13	4	1
16	—'23	—4'0	4	7	1	0
17	+ '17	+0'3	3	9	3	1
18	—'12	—3'0	2	4	2	2
19	+ '22	—0'4	8	7	0	0
20	+ '28	0'0	7	12	3	1
21	+ '40	—4'5	4	6	1	0
22	—'42	+0'7	2	3	6	1
23	—'45	+2'8	3	14	2	2
24	—'49	+2'2	3	8	2	2
25	+1'00	+2'4	4	6	2	0
26	+ '90	—0'3	1	13	2	4
27	—'08	+1'9	2	16	5	0
28	+ '12	+0'9	2	25	2	2
29	—'41	+2'2	1	14	2	1
30	—'22	—0'4	2	27	5	0
31	—'75	+3'3	7	20	5	0
32	—'58	+0'4	11	20	4	0
33	—'53	+2'2	4	15	9	1
34	—'77	+7'2	3	12	16	0
35	+1'06	+2'1	1	13	13	1
36	—'53	+2'9	2	14	12	4
37	—'37	+1'3	1	35	6	1
38	+ '29	—2'0	3	62	13	0
39	+ '53	—3'5	2	97	15	1
40	+ '04	—3'1	6	118	12	5
41	—'16	—1'1	7	137	13	3
42	—'88	—1'2	5	167	9	0
43	—'17	+2'4	2	175	13	1
44	+ '12	+4'3	2	177	5	0
45	—'22	+5'6	2	181	6	3
46	—'73	+3'6	8	185	3	1
47	—'74	+4'7	5	192	6	1
48	—'48	+8'8	6	164	8	1
49	+ '29	+3'7	2	166	8	0
50	—'48	—10'6	1	107	5	5
51	—'46	—5'0	1	70	1	1
52	+ '95	—2'9	3	46	5	1

PREVALENCE OF ZYMOTIC SICKNESS DURING 1899.

Notification of Cases of Dangerous Infectious Diseases.—The 75th section of the Birkenhead Corporation Act, 1881, which requires householders and medical men in attendance to notify cases of dangerous infectious diseases to the Sanitary Authority, gives facilities for supplementing the statement of the mortality from zymotic diseases with a statement of cases of sickness due to some of the chief zymotic diseases, month by month, as they were reported. The diseases the Authority understand by the term “dangerous infectious diseases” are—

Small-pox	Fever	{	Typhus
Measles			Typhoid
German Measles			Continued
Scarlatina			Relapsing
Diphtheria		Puerperal Septicæmia	
Membranous Croup	Cholera		

The cases notified appear in the following return, showing that 3068 cases were notified during the year, being a large increase on the number notified last year. This was chiefly due to a widely spread epidemic of measles, particularly prevalent during the last four months of the year.

The following Table gives the number of Notifications of Dangerous Infectious Diseases in each month of the year.

1899	Smallpox	Measles	German Measles	Scarlatina	Diphtheria	Typhus Fever	Typhoid Fever	Puerperal Fever.	Fever	Cholera	Croup	TOTAL
January....	..	20	1	18	18	..	20	1	..	..	2	80
February	17	1	14	12	..	10	1	..	..	..	55
March	42	4	38	10	..	12	2	..	..	1	109
April	35	3	13	4	..	11	..	..	..	..	66
May	33	4	22	3	..	8	1	..	..	..	71
June	38	1	12	8	..	11	..	..	..	2	72
July	92	3	8	3	..	18	1	..	..	..	125
August	67	1	14	1	..	41	..	..	..	..	124
September...	..	235	1	11	6	1	50	1	..	..	..	305
October	693	2	22	8	..	50	..	..	..	..	775
November...	..	765	1	22	6	..	26	2	..	..	1	823
December..	..	424	1	11	7	..	18	2	..	..	..	463
	..	2461	23	205	86	1	275	11	..	..	6	3068

and the next Table the number of cases of the different diseases notified in each year since 1882, when compulsory notification came into force.

The statement is as follows:—

Year	Smallpox	Measles	German Measles	Scarlatina	Diphtheria	Typhus Fever	Typhoid Fever	Fever	Croup	Cholera	TOTAL
1882	..	615	..	152	9	99	86	25	..	1	987
1883	3	548	..	169	19	42	76	17	..	..	874
1884	131	941	..	277	13	17	74	9	..	1	1463
1885	24	1001	..	556	21	1	38	2	..	..	1643
1886	6	595	10	617	24	18	58	4	..	..	1332
1887	..	1334	12	911	21	8	142	4	..	..	2435
1888	..	819	4	438	36	13	231	2	..	..	1546
1889	..	1057	13	262	30	..	191	1	..	..	1554
1890	..	1620	17	247	35	64	182	1	..	..	2166
1891	..	524	38	180	28	38	197	2	..	..	1007
1892	12	1542	5	218	25	10	150	4	..	..	1966
1893	15	540	11	121	77	4	221	9	..	..	1298
1894	12	1818	16	379	133	7	194	6	..	..	2565
1895	3	258	32	430	142	3	192	12	9	..	1081
1896	..	2166	35	606	115	..	149	6	1	..	3078
1897	..	1141	5	630	80	2	152	17	1	..	2028
1898	1	589	9	643	190	1	243	17	3	..	1696
1899	..	2461	23	205	86	1	275	11	6	..	3068

The Disinfecting House.—Good service continues to be rendered by the Disinfecting House in Prince Edward Street. Mattresses, palliasses, beds, pillows, bolsters, woollen clothing, and fabrics from infected rooms are brought here and disinfected by super-heated steam. The bedding and clothing are fetched and delivered by the Corporation Officers in light covered vans provided for the purpose. Occasionally, when the bedding is exceptionally foul, it is destroyed at the disinfecting house furnace, and replaced or allowed for at the cost of the Authority. There is a man specially appointed to take charge of the apparatus; and a Disinfecting Inspector to supervise the disinfection of premises, the removal and delivery of bedding, &c.

The Refuse Destructors.—There are now two refuse destructors, one in New Chester Road and one in Cleveland Street.

A description of these has appeared in my former reports, and I feel that it is unnecessary to say more about them here.

VITAL AND MORTAL STATISTICS FOR THE YEAR.

Area.—The Borough has an area of 3850 acres, or a little more than six square miles.

Population.—The population of the Borough of Birkenhead on the 30th of June, 1899, was according to the estimate of the Registrar-General, 115,162, an addition to the estimated population on the 30th of June, 1898, of 1973 persons, of which 1237 represents the excess of births over deaths or natural increase.

Before accepting this estimate as correct, and taking it as the basis of our calculations for the different birth and death rates, &c., in our vital statistics for the year, we must look closer into the matter and see whether this estimate corresponds with the estimate arrived at by other means from information obtainable within the Borough. If we do this we shall find that the Registrar-General's estimate for 1899 is too large by about 766.

The following are the statistics on which I make this statement:—

In 1891, at the time the census was taken, there were in Birkenhead 17,495 inhabited houses with an average of 5·7 individuals per house, giving a population of 99,857. Since that time, however, there have been 1840 new houses built and 332 houses demolished up to Midsummer, 1899, or taking the one from the other an addition of 1508 houses to the total number in the Borough. To get at the actual number of inhabited houses at Midsummer, 1899, wants a little further calculation, thus:—

Number of inhabited houses at time of census	17,495
Number of uninhabited do do	1,545
Number of houses built since census, less those demolished ..	1,508
<hr/>	
Total number of houses in the Borough, 30th June, 1899	20,548
Number of uninhabited houses, 30th June, 1899	482
<hr/>	
Total number of inhabited houses do	20,066
<hr/>	

Allowing the same number of persons per house as was found to exist at the time of the census return, viz., 5·7, and multiplying this by the number of inhabited houses, we shall

arrive at a more accurate estimate of the population than by the method adopted by the Registrar-General. In this way $5.7 \times 20,067 = 114,376$, a difference of 766 on these two estimates.

In calculating the rates, &c., contained in the following tables, I have therefore taken this revised estimate as my basis.

Population, Area in Acres, and Density of Population.—The next table shows the population of the several townships forming the Borough as given in the census of 1891, and the estimated population at Midsummer, 1899, the area in acres, and the number of persons per acre, as follows:—

TOWNSHIPS	Popula- tion at Census 1891	Population at Midsummer 1899	Area in Acres	Persons per Acre
Birkenhead	58287	66762	1279½	52.16
Claughton	3510	4020	438½	9.16
Tranmere	30680	35141	1071½	32.80
Oxton	4429	5073	814	6.23
Higher Bebington (part of) ..	2951	3380	246½	13.72
Birkenhead Borough	99,857	114,376	3850	29.70

Uninhabited Property in the Borough.—I am indebted to the Chief Constable (W. S. Davies, Esq.) for the particulars contained in the following table, showing the amount of uninhabited property in the town during the year:—

Return of Uninhabited Property in the Borough. 1898-99.

	District.	Private Houses	Shops	Cottages	Dock Cottages	Total
For the Half-year ending 31st December, 1898.	Birkenhead	48	60	92	..	200
	Claughton and Oxton..	18	2	33	64	117
	Tranmere & Bebington	72	15	86	..	173
	Total for Borough..	168	77	211	64	520
For the Half-year ending 30th June, 1899.	Birkenhead	87	100	122	..	309
	Claughton and Oxton..	40	2	8	77	127
	Tranmere & Bebington	54	14	94	..	162
	Total for Borough..	181	116	224	77	598
For the Half-year ending 31st December, 1899.	Birkenhead	61	60	86	..	210
	Claughton and Oxton..	32	3	13	84	132
	Tranmere & Bebington	87	21	63	..	171
	Total for Borough..	183	84	162	84	513

It will be seen from the above that the number of uninhabited premises on the 31st December, 1899, was 7 less than that for the half-year ending 31st December, 1898. The fact that 433 new houses were built and 28 old houses pulled down during the year must also be taken into account, making an actual addition of 405 houses during the year. The number of uninhabited and unoccupied premises on the 30th June, 1899, was 482 houses and 116 shops, or 598 altogether.

The total number of inhabited houses on the 31st December, 1899, was 20,119, or 53 more than on the 30th June.

The number of new houses built during the last nine years is 2083, as shown in the following table, for which I am indebted to the Borough Surveyor. The number of houses demolished during the same period being 249.

The total number of houses in the Borough on the 31st December, 1899, was approximately 20,774, and the approximate estimate of warehouses, schoolrooms, &c, in the Borough is 1268, as estimated by the Police Authorities.

Number of New Houses erected in the Borough, 1891-99.

January 1st to December 31st, 1891.....	87
„ „ 1892.....	99
„ „ 1893.....	108
„ „ 1894.....	139
„ „ 1895.....	175
„ „ 1896.....	255
„ „ 1897.....	349
„ „ 1898.....	438
„ „ 1899.....	433
	<hr/>
Total.....	2083
	<hr/>

The number of houses demolished during 1899 was 28. Number demolished from January 1st, 1891, to December 31st, 1899, was 346.

The number of new houses built from January 1st to June 30th, 1899, was 190, and the number demolished 14. The number built from July 1st to December 31st was 243, and the number demolished was 14.

Births and Deaths in Birkenhead.—During the year 1899 the returns of the local registrars recorded 3451 births and 2214 deaths in the Borough of Birkenhead. The natural increase in the population in 1899 was therefore 1237. Of the births 1759 were males and 1692 were females; of the deaths 1137 were males and 1077 were females.

Further particulars as to the births and deaths in the Borough in 1899, that is to say, the number registered in each quarter of the year, and the number referred to each township, are given in the table subjoined. The births and deaths in the premises belonging to the Union are entered separately.

BIRTHS	1st Qr.		2nd Qr.		3rd Qr.		4th Qr.		1899		Total
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Birkenhead	270	256	305	278	278	244	260	259	1113	1037	2150
Claughton	5	9	6	6	11	6	12	3	34	24	58
Tranmere	133	118	141	160	121	130	141	147	536	555	1091
Oxton	4	7	8	11	4	11	8	11	24	40	64
Bebington	6	7	5	3	6	3	14	3	31	16	47
Union Hospital	8	2	6	10	4	4	3	4	21	20	41
Birkenhead Borough ..	426	399	471	468	424	398	438	427	1759	1692	3451

DEATHS	1st Qr.		2nd Qr.		3rd Qr.		4th Qr.		1899.		Total
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Birkenhead	183	162	139	144	189	169	159	152	670	627	1297
Claughton	6	11	4	5	4	6	4	1	18	23	41
Tranmere	76	91	58	67	88	69	73	76	295	294	589
Oxton	1	10	0	4	6	6	7	5	14	25	39
Bebington	8	6	1	3	2	6	7	4	18	19	37
Union Hospital	40	17	21	30	23	23	38	19	122	89	211
Birkenhead Borough ..	314	297	223	253	312	270	288	257	1137	1077	2214

Birth-rates and Death-rates in Birkenhead.—The annual rates, per 1000 living, of births and deaths, for the whole incorporated area, and the townships within it, appear in the next table.

1899	Annual Rate per 1000 Living	
	Births.	Deaths
Birkenhead	32·2	19·4
Claughton	14·4	10·1
Tranmere	31·04	16·7
Oxton	12·6	7·6
Bebington	13·9	10·9
Birkenhead Borough including B and D. in Union premises) ..	30·17	19·35

The birth-rate for 1899 is 0·17 per 1000 lower than last year, and 2·05 per 1000 lower than the average birth-rate during the ten years preceding. The death-rate is 1·85 per 1000 higher than that recorded last year, and 0·15 per 1000 lower than the average death-rate for the preceding ten years.

The death-rate of Birkenhead township being 2·7 per 1000 living higher than the death-rate in Tranmere, and 9·3 per 1000 higher than that of Claughton, is in part accounted for by the much greater density of population in Birkenhead. The death-rates of Oxton and Bebington being low is in part due to these being practically rural districts, to the easy circumstances of most of the inhabitants, and the large proportion of domestic servants and unmarried adults therein.

The next table shews the estimated population of Birkenhead, the density of population and the number of births, deaths and zymotic deaths, and also the birth and death-rates deducible from these figures for this year. These figures for the years 1878 to 1898 were given in my report for the latter year.

Year	Estimated Population at Midsummer	Persons per acre.	BIRTHS.		DEATHS.		ZYMOTIC DEATHS.	
			Number of Births	Birth rate per 1000 per annum	Number of Deaths	Death rate per 1000 per annum	Number of Deaths	Death rate per 1000 per annum
1899	114376	29·70	3451	31·72	2214	19·35	328	2·86

The proportion of Deaths of Infants under One year to the Births registered.—The proportion in Birkenhead Borough in 1899 was equal to 185 per 1000, which is considerably above the average (169) for ten years—1889-98—but below that recorded last year, when it was 186. In the thirty-three great cities and boroughs in England and Wales, amongst which Birkenhead is classed, the proportion of deaths under one year to births registered in 1899 was 181. It varied greatly in the different towns, ranging from 154 in Croydon to 255 in Preston.

Birth-rates and Death-rates in the thirty-three great towns in England.—In order that the birth-rates and death-rates of the Borough of Birkenhead in 1899 may be compared with the corresponding rates of the most populous cities and boroughs in England, the following table has been compiled from the Registrar General's Quarterly Returns of Births, Deaths, and causes of Death in London and the other great towns, 1899. The table gives the estimated population of the thirty-three large towns and the estimated number of persons per acre in each at Midsummer, 1899. The birth-rates and death-rates are for the fifty-two weeks ending 31st December, 1899.

Out of the whole number of cities and boroughs in this list sixteen had lower birth-rates and fifteen lower death-rates than Birkenhead. The birth-rate of the gross population of the great cities and boroughs was nearly the same (0·3 greater) as that of Birkenhead, and the same may be said of the death-rate which was 0·3 per 1,000 living higher than the corresponding rate in Birkenhead. The population of Birkenhead it will be noted is greater than nine on the list of great towns.

The birth-rate of the thirty-three towns in 1899 (30·2) is lower than the mean rate of the ten preceding years, 1887-98, and lower than last year (30·3). The death-rate of the thirty-three towns in 1899 (20·2) is 1·2 per 1,000 higher than last year (19·0), but below the average rate in the preceding ten years (21·5).

Tabular Statements.—In the appendix to this Report are tabular statements of the year's mortality within the Borough, classified according to the diseases, ages, and localities, a weekly register of deaths and of meteorological results, a monthly summary of deaths from all causes and zymotic diseases, with the rates per 1,000 per annum, together with a table specifying the occupation or "description" of each person whose death was entered during the year, a return of deaths in the Birkenhead Union Hospital and Workhouse, and a sketch map of the town showing the boundaries of the wards, &c.

Table I. shows the deaths registered in the whole Borough during 1899, arranged with reference to the age at which death occurred in each case. They are disposed in four sub-tables—the deaths in the townships of Birkenhead and Claughton in the first, deaths in Tranmere (exclusive of the Union premises) and Oxtun in the second, the deaths in the incorporated portion of Higher Bebington in the third, and the deaths in the Union Hospital and Workhouse in the fourth. The deaths of infants are entered up in three columns—those under one year, those of one year and under two years, and those turned two years and under five. Then follow the deaths of children and young persons, those turned five years and under twenty; and of adults those turned twenty and under forty, and those turned forty and under sixty. In the last two columns are the deaths of old people, those turned sixty and under eighty, and those of eighty and upwards. Reference to this table will show that, of the gross local mortality for 1899, the deaths of infants under one year of age accounted for 640, those over one year but under five years of age 306, children and young persons 131, adults 637, old people sixty years of age and upwards 496. In the township of Birkenhead and Claughton 435 deaths occurred among infants. 207 in children over one and under five, 82 among children and young persons, 374 among adults, and 240 among old persons. In Tranmere and Oxtun the number of deaths of infants under one year was 193, of those under five and over one year 93, of children and young persons 37, of adults 149, and of old people 155.

In Bebington Ward there were 5 deaths of infants under one year, three over one and under five years, 6 of children and young persons, 9 of adults, and 14 of old people.

The relative proportion of deaths in 1899 among the infants, children and young persons, adults and old people, to the whole number of deaths, in certain sub-divisions of the borough, in the premises controlled by the Guardians of the Poor, and in the entire incorporated area, is readily shown in tabular form, thus:—

PERCENTAGE OF DEATHS AT CERTAIN AGES TO TOTAL DEATHS.	Under 1 Year	Age between			60 years and upwards
		1—5	5—20	20—60	
Birkenhead and Claughton	19·6	9·3	3·7	16·8	10·8
Tranmere and Oxtou	8·7	4·2	1·6	6·7	7·0
Bebington	0·2	0·1	0·2	0·4	0·6
Union Hospital and Workhouse	0·3	0·1	0·4	4·7	3·8
Birkenhead Borough	28·9	13·8	6·05	28·7	22·4

In this respect the local mortality compares favourably with the mortality in most great cities and boroughs. The local mortality for 1899 also compares favourably with the local mortality during the decade 1889-98. The percentages taken out for Bebington have little significance, the number of deaths being so small.

Table II. is the weekly register of deaths in the Borough of Birkenhead for 1899. The deaths are entered as in Table I., into four sub-tables, representing Birkenhead and Claughton, Tranmere and Oxtou, Bebington, and the Union Hospital and Workhouse. Table III. is a summary of the weekly register of deaths. Table IV. is a Weekly Condensed Register of Meteorological Results. Table V. is a Lunar Monthly Table of deaths from all causes, and Zymotic Diseases, with the rates per 1,000 per annum. Table VI. a street register of deaths; and Table VII. a register giving the description of those who died.

The Classification of Death Causes.—The causes of death, as they appear in Tables I. and II. in the appendix, are systematically classified according to the principles laid down by the late Dr. W. Farr, the nosology being that adopted by the

Registrar-General until within the last few years, which experience has shown to be well suited for statistical purposes. The death causes are arranged under classes and orders, the latter corresponding to the families of Natural History. Genera, or what in diseases would be varieties, are not distinguished. All death causes are thus conveniently classified under 116 heads some of which, however, include diseases very distinct from one another.

At the beginning of Table I. are the totals of deaths from all causes, and on the next line the totals of deaths from specified causes. The deaths which it is necessary to refer to unspecified causes are not only those ascribed, in legal phraseology, to "visitation of God" or "natural causes," but also those which, with almost equal vagueness, are classified as due to "tumour," "coma," &c. The deaths from specified causes are then divided into five classes. Class I. (the zymotic) embraces all diseases, either epidemic, endemic, or contagious, which are induced by some specific body, or by want of, or by the bad quality of food. The diseases coming under Class II. (constitutional or cachectic) appear to be due to a bad habit of body, and are sometimes hereditary. Class III. takes in diseases the effects of which are manifest in disturbing or obliterating the function of particular organs or systems. Class IV. includes the conditions tending to produce death, which are the incidental results of the formative, reproductive, and nutritive processes. Class V. groups together all deaths which are the evident and direct result of physical or chemical forces.

Of the 2214 deaths registered in the Borough during 1899, 2212 were ascribed to specified causes; that is to say 328 to zymotic diseases, 378 to constitutional diseases, 1117 to local diseases, 328 to developmental diseases, and 61 to violence. The proportion of deaths from zymotic diseases, to the whole number of deaths was thus 14·8 per cent. The proportions which deaths ascribed to zymotic diseases bear to deaths from all causes is, however, a matter of no great significance, as of course the general death-rate varies considerably from year to year, and

any increase in the fatality of non-zymotic diseases, such as phthisis or pneumonia (which are closely allied to zymotic diseases) makes the proportion of deaths from zymotic diseases compare more favourably.

An accurate estimate of the relative mortality from zymotic diseases, and from the other four classes of death-causes just referred to, can only be made by taking out the death-rate per 1000 living, as respects each of the five classes. This has been done, and the results are displayed in the following table. Parallel with the column containing the death-rates for 1899 are the corresponding mean death-rate for 1889 to 1898.

CLASSES	Annual Death-rate per 1000 Living	
	1889-98 Average	1899
Zymotic Diseases	3.06	2.86
Constitutional Diseases	2.79	3.30
Local Diseases	9.66	9.76
Developmental Diseases	3.05	2.86
Violent Deaths.....	0.57	0.53

This table shows that the death-rate as regards zymotic diseases in 1899 was below the average of the last ten years by 0.20 per 1000. The constitutional death-rate was slightly above the mean by 0.51, and local diseases 0.10 above the average for the last ten years. The death-rate as regards developmental diseases was 0.19 lower than the mean rate. The proportion of deaths due to violence was 0.04 below the mean.

Deaths from Zymotic Diseases.—The deaths from zymotic diseases include 135 by what have been termed the chief zymotics (certain diseases belonging to the miasmatic order), viz., measles 50, scarlatina 5, diphtheria 21, membranous croup 6, fevers 49, and puerperal septicæmia 4. The remaining 193 were entered to what have been called minor zymotics (diseases less prevalent, less fatal, or less obviously zymotic in character), viz., whooping cough 82, erysipelas 6, influenza 23, dysentery 5, diarrhœa 71, syphilis 5, and stricture of urethra 1. The mortality from the chief zymotics in 1899 was equal to a death-rate of 1.18 per 1,000 living, as against 1.43 in 1898 and 1.25 in 1897.

Relative Fatality of Chief Zymotic Diseases.

The following table shows at a glance the relative fatality of the chief zymotic diseases for the year.

Year	Deaths from Zymotic Diseases.								Death rate per 1000 living.							
	Smallpox	Measles	Scarlatina	Diphtheria	Whooping Cough	Typhus Fever	Typhoid Fever	Diarrhoea	Smallpox	Measles	Scarlatina	Diphtheria	Whooping Cough	Typhus Fever	Typhoid Fever	Diarrhoea
1899	..	50	5	21	82	1	48	71	0·00	0·43	0·04	0·18	0·71	0·00	0·41	0·62

The figures for the years 1878 to 1898 were given in my Report for 1898.

The mortality from measles and scarlet fever was lower than the average, and the mortality from typhoid considerably higher.

Constitutional, Local, and Developmental Diseases and Death Rates—Having given the death-rates in Birkenhead in respect of the five classes into which death-causes have been divided, and the principal and other zymotics, a table is now submitted showing the death-rates in the Borough as respects the orders under which the death-causes belonging to Classes II., III., and IV. have been grouped. Parallel with the column containing the rates of 1899 are the mean death-rates in the ten years of 1889-98.

CONSTITUTIONAL, LOCAL, AND DEVELOPMENTAL DISEASES.				Annual Death-rate per 1000 Living	
				1889-98 Average	1899
Dietetic Diseases	..	..	..	0·12	0·21
Parasitic Diseases	..	..	..	0·00	0·00
Diathetic Diseases	..	..	..	0·76	1·23
Tubercular Diseases	..	..	..	1·97	1·85
Diseases of Nervous System	..	..	..	2·49	1·96
„ Organs of Circulation	..	..	..	1·27	1·77
„ Respiratory Organs	..	..	..	3·95	3·53
„ Digestive Organs	..	..	..	1·27	1·89
„ Urinary Organs	..	..	..	0·43	0·45
„ Organs of Generation	..	..	..	0·03	0·00
„ Organs of Locomotion	..	..	..	0·02	0·04
„ Integumentary System	..	..	..	0·06	0·09
Developmental Diseases of Children	..	..	..	0·78	0·65
„ „ Adults	..	..	..	0·07	0·07
„ „ Old People	..	..	..	1·01	1·01
Diseases of Nutrition	..	..	..	1·18	1·11

The four orders under which constitutional diseases are arranged have little in common except that in typical diseases in each order new morbid products are deposited. Twenty-five deaths took place from dietetic diseases during 1899, viz.— inanition 6, alcoholism 9, purpura 2, and rickets 8. Diathetic diseases account for 141 deaths, of which 91 were due to cancer, 4 to rheumatism, 8 to anæmia, 5 to mortification, 3 to dropsy, 28 were ascribed to tumour, and 2 to gout. All but 32 out of the 141 were deaths of adults. Tubercular diseases account for 212 deaths, of which 171 were due to phthisis pulmonalis, 21 to hydrocephalus, 19 to tabes mesenterica, and 1 to hæmoptysis. 161 of the deaths in this order were of children and young persons, and 51 of adults. The diathetic disease death-rate of 1899 is 0·47 above the local mean rate, and the tubercular disease death-rate of 1899 is considerably below the local mean rate.

Of the eight orders under which Local diseases have been arranged, the first four account for an overwhelming proportion of the mortality referred to this class. The deaths from diseases of the brain and nervous system in 1899 were 225; the deaths from diseases of the heart and blood vessels were 203; the deaths from diseases of the respiratory organs were 404; and the deaths from diseases of the digestive organs were 217. The deaths entered to diseases under the remaining four orders were 68. Of the 1117 deaths from local diseases, 440 were of infants under five years of age, and 61 were of children and young persons over five years and under twenty. It will be seen that the death-rate as regards diseases of the respiratory organs and nervous system in 1899 was considerably below that of the mean rate. The death-rate as regards diseases of the organs of circulation in 1899 has increased to a point higher than at any period previously recorded in the Borough. The death-rates in respect of diseases of the digestive and urinary organs in 1899 were also about the mean rates.

Of the deaths caused in Class IV., 66 were ascribed to so-called developmental diseases of children, *i.e.*, premature birth 54, malformations 1, and teething 11; to old age 115; and to diseases of nutrition, that is, atrophy, debility, and marasmus, 128. The

death-rates for 1899 in this class do not compare unfavourably with the corresponding local mean rates. The number of deaths ascribed to old age is about the average, and the number ascribed to the diseases of nutrition are considerably less than the mean. There is some reason to believe that the number of deaths due to child-birth is under-stated year by year; many deaths in child-bed being certified to secondary causes, "peritonitis," "convulsions," &c.

Of the total number of deaths registered during 1899, 25 males and 56 females survived the age of 80; this works out at the rate of 1.12 per cent. and 2.52 per cent. respectively.

Inquests.—The number of inquests held during 1899 was 153, thus 6.91 per cent. of the sum of the deaths in the Borough formed the subject of official enquiries. Of these inquests, 104 were in the township of Birkenhead, 38 were in Tranmere, 3 in Oxtun, 4 in Bebington, and 4 was held in the Workhouse; 85 were on the bodies of males, and 68 on the bodies of females. In 1898 the number of inquests held was 135, in 1897—149, in 1896—153, in 1895—165, and in 1894—146. Out of the 153 inquests held, 8 were upon the bodies of infants whose death was due to asphyxia, owing to being overlaid. It is a pity that this form of death in children cannot be more stringently dealt with. The present method of dealing with cases of the kind does not tend to reduce their number or frequency.

Deaths not Certified.—Not all the death causes which are classified represent diseases or symptoms observed and certified by medical men in attendance during the last illness, or verdicts following official investigation. A significant proportion of the death causes are entered in the register on the doubtful testimony of deceased persons' relatives or friends, or fellow lodgers. The registrars have, therefore, been required to mark in the returns furnished, every death not certified by a registered practitioner, or made the subject of a coroner's inquest. In 1899, out of the 2,214 deaths registered, 15 (8 males and 7 females) were marked "not certified," that is 0.67 per cent. 3 of these uncertified deaths took place in the township of

Birkenhead, 11 in Tranmere, and 1 in Claughton. 3 of these deaths were of infants under one year of age. The causes of the 15 deaths were entered in accordance with the statements of persons giving information to the registrars as follows:—

Heart Disease, Syncope	...	...	...	...	1
Acute Congestion of Liver, Pericarditis, and Cramp of Heart	...	...	...	...	1
Hypertrophy of the Liver, General Dropsy	...	...	...	...	1
Apoplexy...	...	...	...	...	1
Phthisis and Dropsy	...	...	...	...	2
Heart Disease	...	...	...	...	2
Premature Birth...	...	...	...	...	2
Convulsions	...	...	...	...	1
Bronchitis and Heart Disease	...	...	...	...	1
Inflammation of Brain and Convulsions	...	...	...	...	1
Hæmorrhage from Lung	...	...	...	...	1
Acute Phthisis	...	...	...	...	1

though how such conclusions were arrived at does not appear, and I consider such deaths ought not to be registered without a Coroner's certificate.

The proportion of uncertified deaths to the sum of the deaths was as already stated, 0·67 per cent. as compared with 0·80 per cent. in 1898.

Deaths classified according to Localities.—Tables I, II., III., IV., and V., in the appendix, having been fully discussed, are followed by Table VI., in which the deaths registered during 1899 are classified according to the localities in which they occurred. The Street Register is divided into three parts—the part marked “A” including the streets and places in the old Birkenhead Improvement District; the part marked “B” the streets and places in Tranmere and Oxtun; and the part marked

"C" the streets and places in the incorporated portion of Bebington. Opposite each street or place is the number of deaths from all causes and from zymotic diseases, registered as occurring in that street or place during the year. In the headings to the different parts of this Table (and in Tables I., II., and III.) the names of townships are not placed as indicating the locality referred to, but the names of wards. Thus the old Improvement District appears as Cleveland, Claughton, Grange, and Argyle Wards; Tranmere and Oxton appear as Oxton, Egerton, Clifton, and Mersey Wards; and the portion of Bebington incorporated appears as Bebington Ward. As it was felt that particulars of the number of deaths from all causes, zymotic diseases, and causes not certified, in each ward, would prove interesting, and as the Street Register does not afford this information, the Table here submitted has been drawn up.

1899		Deaths from All Causes		Deaths from Zymotic Diseases		Deaths from Causes Uncertified		No. of Inquests held.	
		M.	F.	M.	F.	M.	F.	M.	F.
Cleveland Ward	..	203	173	26	26	1	1	25	8
Claughton	..	18	23	4	2	1	..	..	..
Grange	..	298	273	47	42	..	..	21	21
Argyle	..	169	181	26	36	1	..	14	15
Oxton	..	14	25	3	2	..	..	..	3
Egerton	..	73	79	8	15	2	2	6	5
Clifton	..	160	150	27	28	2	4	11	3
Mersey	..	62	65	14	8	1	..	7	6
Bebington	..	18	19	3	3	..	..	..	4
Birkenhead Borough including deaths in Union premises	.. .. }	1137	1077	162	166	8	7	85	68

This table will, with the Street Register, furnish all the information that can be required on the subject. It is well to note that the streets opposite which the highest death totals appear are not the streets in which the mortality was really the highest. In 1899, as in past years, the sickness and mortality was most prevalent in the smaller streets and alleys inhabited by the very poor.

The following table shows the relative mortality of the wards during 1899.

1899	Population at Census 1891.	Estimated Population at Midsummer 1899	General Death-rate per 1000 Living	Zymotic Death-rate per 1000 Living
Cleveland Ward	17345	19868	18·9	2·61
Claughton „	3510	4020	10·1	1·49
Grange „	25353	29039	19·6	3·06
Argyle „	15589	17855	19·6	3·47
Oxton „	4429	5073	7·6	0·98
Egerton „	9987	11440	13·2	2·01
Clifton „	15091	17285	17·9	3·18
Mersey „	5602	6416	19·7	3·42
Bebington „	2951	3380	10·9	1·77
Birkenhead Borough including deaths in Union premises .. }	99857	114376	19·35	2·86

The deaths in the Borough Hospital, instead of being entered as occurring in Cleveland Ward, have been referred to the wards from which the patients who died were received. Similarly, the deaths in the Birkenhead and Wirral Children's Hospital and Lying-in Hospital have not been entered to Grange Ward and Argyle Ward respectively, but as occurring in the wards from which the patients who died were received. It will be seen that the ward showing the highest zymotic death-rate in 1899 was Argyle Ward. The highest death-rate was in Mersey Ward, and that all the three wards in the township of Birkenhead show a high death-rate compared with the wards in the remainder of the Borough, except Mersey Ward, which has a similar class of population.

General and Zymotic Death-rate, month by month, throughout the year.—Table V. in the appendix shows the general and zymotic mortality, month by month, throughout the year. The general death-rate was highest in the month ending March 25th, 23·9, and lowest in the month ending July 15th, 13·6. The zymotic death-rate ranged from 4·54 in September to 1·70 in July.

Descriptions of those who died during 1899.—The last of the tables appended, Table VII., gives a “description” of all those whose deaths have been registered during the year with the exception of the deaths taking place at the Union Hospital and Workhouse. The information is furnished in each case by the

person registering the death, and is doubtless trustworthy. The table may be of some use in supplying the material for a rough estimate of the effects of the year's mortality on the community, *i.e.*, the local loss sustained by the professional and commercial classes, the artisan and labouring classes, and that largest class of all, the non-productive. Those also employed in any recognised form of skilled or unskilled labour may here see the number of deaths in 1899 in the ranks of fellow-workers in the Borough. The number of bread-winners removed by death from the local community in 1899 is computed thus:—The first two columns of Table VII. are cast and added together, and from this is subtracted the sum of those described as annuitants, pensioners, ladies and gentlemen of independent means, retired tradesmen &c., or whose occupation is “unknown.” It does not, of course, follow that everyone described as belonging to any particular trade or calling was necessarily working for a living within a reasonable time of his or her decease, or that everyone described as a son daughter, wife, or widow was non-productive, or merely occupied with domestic duties. Still, a proximately correct estimate of those among the deceased who were self-supporting and family-supporting, as distinguished from those who were wholly dependent, or only partially self-supporting. The number of those who must have been wholly dependent on others may be computed from figures in the age table.

Illegitimacy.—Statistics relating to illegitimacy are important, not merely on account of the bearing which such a subject has upon the social life of the community, but also with a view ultimately of showing to some extent the influence which illegitimacy exerts upon the “chances of life” of infants, as it is well known that the death-rate of illegitimate children is considerably greater than that of those born in wedlock. I have thought it desirable, therefore, to continue these statistics in this report, as the subject is one of some interest.

The following table gives the total number of legitimate and illegitimate births, with the rate per 1000 of births and per 1000

living, and statistics relative to the deaths of such children under one year of age.

Illegitimate Birth and Death Rates, 1899.

Registrar's Sub-District	Estimated Population 1899.	BIRTHS		ILLEGITIMATE BIRTHS		Total deaths of children under one year of age	Deaths of illegitimate children under one year of age	Proportion of deaths of illegitimate to total deaths under one year of age
		Legitimate	Illegitimate	to 1000 living	to 1000 births			
Birkenhead ..	66762	2092	58	0·86	27·7	428	33	12·9
Tranmere, Oxtan, Cloughton, and Bebington ..	47614	1238	63	1·32	50·8	205	17	12·0
Total	114376	3330	121	1·05	36·3	633	50	12·6

It will be seen from the above that for every 1000 *legitimate* births registered during the year 175 deaths of *legitimate* children under one year of age took place, whilst for every 1000 *illegitimate* births registered during the same period no less than 413 deaths of *illegitimate* children under one year of age took place. In other words, 41·3 per cent of the illegitimate children born died within the first year of life. Those numbers are higher by 1 per cent than those for last year, but are very far from satisfactory.

Vaccination.—Mr. John Carter, Clerk to the Board of Guardians of the Birkenhead Poor Law Union, has kindly supplied me with the following *latest completed* information relative to vaccination in the District, viz:—

Returns as to the vaccination of children born during the year from 1st July, 1898, to 30th June, 1899.

Births	Successfully Vaccinated	Insusceptible	Had Small-pox	Died Unvaccinated	Number in respect of whom certificates of conscientious objection has been received	Postponed by Medical Certificate	Removed to Districts the Vaccination Officers of which were duly notified	Removed to places unknown or which cannot be reached	In Abeyance
3562	3004	34	nil	409	10	31	25	43	6

The percentage of children successfully vaccinated out of the total number of births was therefore 84·33 as compared with 85·23 last year and 86·32 in the 1897—a very good record.

The number of deaths of unvaccinated children, viz : 409, gives a percentage of 11·48 as compared with 10·23 last year.

Pauperism.—The latest information obtainable is for the year Michaelmas, 1898, to Michaelmas, 1899. The cost of relief during this period was as follows, viz :—

In maintenance in year ended Michaelmas,			
1899 was	£11727	2	3
Out-door relief (including non-resident and boarded-out paupers).....	7974	11	10½
	<hr/>		
Total	£19701	14	1½
	<hr/>		

The lowest number of In-door Poor in any week during 1899 was 755, and the highest number 931.

The lowest number of Out-door poor in any week during 1899 was 1406, and the highest number 1586.

Marriages.—The number of marriages in the whole of the Superintendent Registrar's District of Birkenhead during the year 1899 was 1157, giving an annual rate per 1000 living of 10·11 as compared with 9·40 last year. There were 93 marriages more during 1899 than in the previous year, an increase of 8·03 per cent

HOUSING OF THE WORKING CLASSES ACT, 1890.

Under the provision of this Act, on the 18th July, 1899, I made a representation under Part II. of the Act respecting the insanitary condition of the premises, Nos. 37, 39, 41, 43, 45 and 47 Hope Street. These premises, generally, were in a very insanitary and dilapidated condition. They have since been entirely demolished.

On the 10th October, 1899, I made a representation under Part II. of the Act, respecting the condition of the premises, Nos. 6, 8, 10, 12, 14, 16 Birch Road, 1, 2, 3, 4 Hall's Yard, four cottages known as Hughes' Cottages, and 1, 2, 3, 4, 5, 6, 7 and 8 Hawthorne Cottages at Oxton, which were in a state so dangerous and injurious to health as to be unfit for human habitation. These premises are to be partly demolished, and the rest re-arranged and made sanitary.

On the 10th October, 1899, I made a representation under the same part of the Act respecting premises, Nos. 114 and 118 Market Street, and the houses adjoining known as 1 to 16 Brunswick Avenue, and although at the close of the year these houses had not yet been demolished, I have reason to believe that by the time I have to write another annual report these may have been done away with also.

On the 14th November, 1899, I made another representation under the same part of the Act, respecting Nos. 118, 120 and 122 Well Lane, and No. 241 Church Road, Tranmere. These premises have now been entirely demolished.

Thus it will be seen a considerable amount of work in Sanitary administration and improvements was accomplished during the year, and the results I think must be satisfactory to the Health Committee.

I am, Gentlemen,

Your obedient servant,

R. SYDNEY MARSDEN,

MEDICAL OFFICER OF HEALTH.

PUBLIC HEALTH DEPARTMENT,

TOWN HALL,

10TH MAY, 1900.

THE INFECTIOUS DISEASES HOSPITAL,
FLAYBRICK HILL.

Report for the Year 1899.

HOSPITAL VISITING SUB-COMMITTEE.

MR. ALDERMAN WILLIAM GETLEY, J.P., Chairman.

„ „ THOMAS SHAW.

„ „ JOSEPH PERRIN.

„ „ JAMES WOODCOCK.

„ COUNCILLOR H. L. PEARSON, M.R.C.S.

MATRON :

MISS EMILY YEOMANS.

The Fever hospital consists of four isolation wards, containing twelve beds and two cots in each ward, and two observation wards containing four beds and two cots each. The total number of available beds is therefore fifty-six, and twelve cots in addition.

During a large part of the year, however, these prove quite unequal to the wants of the town, and patients have repeatedly to be refused admission. I consider that another ward ought to be provided, but this would entail considerable enlargement of the Administration Block, the accommodation of which is now insufficient to meet the requirements of the staff, either for nurses or servants.

The floor space allowed for each bed in the hospital is 156 superficial feet, and the air space per bed 2,028 cubic feet.

The Nursing Staff consists of five charge nurses and ten assistant nurses.

The total number of patients treated in the hospital during the year (January 1st to December 31st) was 204; of these, 183 were admitted during the year, and 21 remained in hospital from 1898. Out of those admitted 33 died, giving a death-rate of 18·0 per cent., a high percentage, but when the serious nature of the diseases is considered, and the exhausted condition in which many of the cases are received, it is readily understood why the fatality is so great, but the chief cause of this large rise in the death-rate for this year was the excessive malignancy of the epidemic of typhoid which appeared—many of the cases of typhoid being the worst I have seen in all my experience.

The following table gives a summary of the cases treated in the hospital during the year 1899, along with the results obtained.

DISEASES		M.	F.	Re-covered		Died	
				M.	F.	M.	F.
Scarlatina	{ remaining ..	6	3	6	3	..	..
	{ admitted ..	27	22	25	21	2	1
Typhoid Fever	{ remaining ..	8	4	8	4	..	..
	{ admitted ..	71	52	53	40	16	12
Diphtheria	" ..	1	2	1	2	..	..
Measles	" ..	..	4	..	4	..	..
Typhus	" ..	1	..	..	..	1	..
German Measles	" ..	..	1	..	1	..	..
Cold	" ..	1	..	1	..	..	..
Marasmus	" ..	..	1	..	..	..	1
Total	..	115	89	94	75	19	14

The case of cold was sent in as typhoid.

APPENDIX.

TABLE I.—Deaths Registered in the County Borough of Birkenhead during the year ending December 31st, 1899, classified according to age.

TABLE II.—Weekly Register of Deaths in the County Borough of Birkenhead for the year ending December 31st, 1899.

TABLE III.—Weekly Condensed Register of Deaths for 1899.

TABLE IV.—Weekly Condensed Register of Meteorological Results for 1899.

TABLE V.—Lunar Monthly Table of Deaths from all causes and Zymotic Diseases in 1899, with the rate per 1000 per annum.

TABLE VI.—Street Register of Deaths—1899.

- A. Cleveland, Cloughton, Grange, and Argyle Wards.
- B. Oxtun, Egerton, Clifton, and Mersey Wards.
- C. Bebington Ward.

SUPPLEMENT TO TABLE VI.—Return of Deaths in Birkenhead Union Hospital and Workhouse, registered in 1899.

TABLE VII.—“Description” of those who died during 1899.

TABLE 1.—Deaths Registered in the Borough of Birkenhead during the Year ending December 31st, 1899.

CLASS.	CAUSES OF DEATH.	CLEVELAND, CLIGHTON, GRANGE AND ARGYLE WARDS.														OXTON EGBURTON, CLIFTON AND MERSEY WARDS.														BEBINGTON WARD.														UNION HOSPITAL.														SUM.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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Year.	1-2	2-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80	80-85	85-90	90-95	95-100	100-105	105-110	110-115	115-120	120-125	125-130	130-135	135-140	140-145	145-150	150-155	155-160	160-165	165-170	170-175	175-180	180-185	185-190	190-195	195-200	200-205	205-210	210-215	215-220	220-225	225-230	230-235	235-240	240-245	245-250	250-255	255-260	260-265	265-270	270-275	275-280	280-285	285-290	290-295	295-300	300-305	305-310	310-315	315-320	320-325	325-330	330-335	335-340	340-345	345-350	350-355	355-360	360-365	365-370	370-375	375-380	380-385	385-390	390-395	395-400	400-405	405-410	410-415	415-420	420-425	425-430	430-435	435-440	440-445	445-450	450-455	455-460	460-465	465-470	470-475	475-480	480-485	485-490	490-495	495-500	500-505	505-510	510-515	515-520	520-525	525-530	530-535	535-540	540-545	545-550	550-555	555-560	560-565	565-570	570-575	575-580	580-585	585-590	590-595	595-600	600-605	605-610	610-615	615-620	620-625	625-630	630-635	635-640	640-645	645-650	650-655	655-660	660-665	665-670	670-675	675-680	680-685	685-690	690-695	695-700	700-705	705-710	710-715	715-720	720-725	725-730	730-735	735-740	740-745	745-750	750-755	755-760	760-765	765-770	770-775	775-780	780-785	785-790	790-795	795-800	800-805	805-810	810-815	815-820	820-825	825-830	830-835	835-840	840-845	845-850	850-855	855-860	860-865	865-870	870-875	875-880	880-885	885-890	890-895	895-900	900-905	905-910	910-915	915-920	920-925	925-930	930-935	935-940	940-945	945-950	950-955	955-960	960-965	965-970	970-975	975-980	980-985	985-990	990-995	995-1000	1000-1005	1005-1010	1010-1015	1015-1020	1020-1025	1025-1030	1030-1035	1035-1040	1040-1045	1045-1050	1050-1055	1055-1060	1060-1065	1065-1070	1070-1075	1075-1080	1080-1085	1085-1090	1090-1095	1095-1100	1100-1105	1105-1110	1110-1115	1115-1120	1120-1125	1125-1130	1130-1135	1135-1140	1140-1145	1145-1150	1150-1155	1155-1160	1160-1165	1165-1170	1170-1175	1175-1180	1180-1185	1185-1190	1190-1195	1195-1200	1200-1205	1205-1210	1210-1215	1215-1220	1220-1225	1225-1230	1230-1235	1235-1240	1240-1245	1245-1250	1250-1255	1255-1260	1260-1265	1265-1270	1270-1275	1275-1280	1280-1285	1285-1290	1290-1295	1295-1300	1300-1305	1305-1310	1310-1315	1315-1320	1320-1325	1325-1330	1330-1335	1335-1340	1340-1345	1345-1350	1350-1355	1355-1360	1360-1365	1365-1370	1370-1375	1375-1380	1380-1385	1385-1390	1390-1395	1395-1400	1400-1405	1405-1410	1410-1415	1415-1420	1420-1425	1425-1430	1430-1435	1435-1440	1440-1445	1445-1450	1450-1455	1455-1460	1460-1465	1465-1470	1470-1475	1475-1480	1480-1485	1485-1490	1490-1495	1495-1500	1500-1505	1505-1510	1510-1515	1515-1520	1520-1525	1525-1530	1530-1535	1535-1540	1540-1545	1545-1550	1550-1555	1555-1560	1560-1565	1565-1570	1570-1575	1575-1580	1580-1585	1585-1590	1590-1595	1595-1600	1600-1605	1605-1610	1610-1615	1615-1620	1620-1625	1625-1630	1630-1635	1635-1640	1640-1645	1645-1650	1650-1655	1655-1660	1660-1665	1665-1670	1670-1675	1675-1680	1680-1685	1685-1690	1690-1695	1695-1700	1700-1705	1705-1710	1710-1715	1715-1720	1720-1725	1725-1730	1730-1735	1735-1740	1740-1745	1745-1750	1750-1755	1755-1760	1760-1765	1765-1770	1770-1775	1775-1780	1780-1785	1785-1790	1790-1795	1795-1800	1800-1805	1805-1810	1810-1815	1815-1820	1820-1825	1825-1830	1830-1835	1835-1840	1840-1845	1845-1850	1850-1855	1855-1860	1860-1865	1865-1870	1870-1875	1875-1880	1880-1885	1885-1890	1890-1895	1895-1900	1900-1905	1905-1910	1910-1915	1915-1920	1920-1925	1925-1930	1930-1935	1935-1940	1940-1945	1945-1950	1950-1955	1955-1960	1960-1965	1965-1970	1970-1975	1975-1980	1980-1985	1985-1990	1990-1995	1995-2000	2000-2005	2005-2010	2010-2015	2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055	2055-2060	2060-2065	2065-2070	2070-2075	2075-2080	2080-2085	2085-2090	2090-2095	2095-2100	2100-2105	2105-2110	2110-2115	2115-2120	2120-2125	2125-2130	2130-2135	2135-2140	2140-2145	2145-2150	2150-2155	2155-2160	2160-2165	2165-2170	2170-2175	2175-2180	2180-2185	2185-2190	2190-2195	2195-2200	2200-2205	2205-2210	2210-2215	2215-2220	2220-2225	2225-2230	2230-2235	2235-2240	2240-2245	2245-2250	2250-2255	2255-2260	2260-2265	2265-2270	2270-2275	2275-2280	2280-2285	2285-2290	2290-2295	2295-2300	2300-2305	2305-2310	2310-2315	2315-2320	2320-2325	2325-2330	2330-2335	2335-2340	2340-2345	2345-2350	2350-2355	2355-2360	2360-2365	2365-2370	2370-2375	2375-2380	2380-2385	2385-2390	2390-2395	2395-2400	2400-2405	2405-2410	2410-2415	2415-2420	2420-2425	2425-2430	2430-2435	2435-2440	2440-2445	2445-2450	2450-2455	2455-2460	2460-2465	2465-2470	2470-2475	2475-2480	2480-2485	2485-2490	2490-2495	2495-2500	2500-2505	2505-2510	2510-2515	2515-2520	2520-2525	2525-2530	2530-2535	2535-2540	2540-2545	2545-2550	2550-2555	2555-2560	2560-2565	2565-2570	2570-2575	2575-2580	2580-2585	2585-2590	2590-2595	2595-2600	2600-2605	2605-2610	2610-2615	2615-2620	2620-2625	2625-2630	2630-2635	2635-2640	2640-2645	2645-2650	2650-2655	2655-2660	2660-2665	2665-2670	2670-2675	2675-2680	2680-2685	2685-2690	2690-2695	2695-2700	2700-2705	2705-2710	2710-2715	2715-2720	2720-2725	2725-2730	2730-2735	2735-2740	2740-2745	2745-2750	2750-2755	2755-2760	2760-2765	2765-2770	2770-2775	2775-2780	2780-2785	2785-2790	2790-2795	2795-2800	2800-2805	2805-2810	2810-2815	2815-2820	2820-2825	2825-2830	2830-2835	2835-2840	2840-2845	2845-2850	2850-2855	2855-2860	2860-2865	2865-2870	2870-2875	2875-2880	2880-2885	2885-2890	2890-2895	2895-2900	2900-2905	2905-2910	2910-2915	2915-2920	2920-2925	2925-2930	2930-2935	2935-2940	2940-2945	2945-2950	2950-2955	2955-2960	2960-2965	2965-2970	2970-2975	2975-2980	2980-2985	2985-2990	2990-2995	2995-3000	3000-3005	3005-3010	3010-3015	3015-3020	3020-3025	3025-3030	3030-3035	3035-3040	3040-3045	3045-3050	3050-3055	3055-3060	3060-3065	3065-3070	3070-3075	3075-3080	3080-3085	3085-3090	3090-3095	3095-3100	3100-3105	3105-3110	3110-3115	3115-3120	3120-3125	3125-3130	3130-3135	3135-3140	3140-3145	3145-3150	3150-3155	3155-3160	3160-3165	3165-3170	3170-3175	3175-3180	3180-3185	3185-3190	3190-3195	3195-3200	3200-3205	3205-3210	3210-3215	3215-3220	3220-3225	3225-3230	3230-3235	3235-3240	3240-3245	3245-3250	3250-3255	3255-3260	3260-3265	3265-3270	3270-3275	3275-3280	3280-3285	3285-3290	3290-3295	3295-3300	3300-3305	3305-3310	3310-3315	3315-3320	3320-3325	3325-3330	3330-3335	3335-3340	3340-3345	3345-3350	3350-3355	3355-3360	3360-3365	3365-3370	3370-3375	3375-3380	3380-3385	3385-3390	3390-3395	3395-3400	3400-3405	3405-3410	3410-3415	3415-3420	3420-3425	3425-3430	3430-3435	3435-3440	3440-3445	3445-3450	3450-3455	3455-3460	3460-3465	3465-3470	3470-3475	3475-3480	3480-3485	3485-3490	3490-3495	3495-3500	3500-3505	3505-3510	3510-3515	3515-3520	3520-3525	3525-3530	3530-3535	3535-3540	3540-3545	3545-3550	3550-3555	3555-3560	3560-3565	3565-3570	3570-3575	3575-3580	3580-3585	3585-3590	3590-3595	3595-3600	3600-3605	3605-3610	3610-3615	3615-3620	3620-3625	3625-3630	3630-3635	3635-3640	3640-3645	3645-3650	3650-3655	3655-3660	3660-3665	3665-3670	3670-3675	3675-3680	3680-3685	3685-3690	3690-3695	3695-3700	3700-3705	3705-3710	3710-3715	3715-3720	3720-3725	3725-3730	3730-3735	3735-3740	3740-3745	3745-3750	3750-3755	3755-3760	3760-3765	3765-3770	3770-3775	3775-3780	3780-3785	3785-3790	3790-3795	3795-3800	3800-3805	3805-3810	3810-3815	3815-3820	3820-3825	3825-3830	3830-3835	3835-3840	3840-3845	3845-3850	3850-3855	3855-3860	3860-3865	3865-3870	3870-3875	3875-3880	3880-3885	3885-3890	3890-3895	3895-3900	3900-3905	3905-3910	3910-3915	3915-3920	3920-3925	3925-3930	3930-3935	3935-3940	3940-3945	3945-3950	3950-3955	3955-3960	3960-3965	3965-3970	3970-3975	3975-3980	3980-3985	3985-3990	3990-3995	3995-4000	4000-4005	4005-4010	4010-4015	4015-4020	4020-4025	4025-4030	4030-4035	4035-4040	4040-4045	4045-4050	4050-4055	4055-4060	4060-4065	4065-4070	4070-4075	4075-4080	4080-4085	4085-4090	4090-4095	4095-4100	4100-4105	4105-4110	4110-4115	4115-4120	4120-4125	4125-4130	4130-4135	4135-4140	4140-4145	4145-4150	4150-4155	4155-4160	4160-4165	4165-4170	4170-4175	4175-4180	4180-4185	4185-4190	4190-4195	4195-4200	4200-4205	4205-4210	4210-4215	4215-4220	4220-4225	4225-4230	4230-4235	4235-4240	4240-4245	4245-4250	4250-4255	4255-4260	4260-4265	4265-4270	4270-4275	4275-4280	4280-4285	4285-4290	4290-4295	4295-4300	4300-4305	4305-4310	4310-4315	4315-4320	4320-4325	4325-4330	4330-4335	4335-4340	4340-4345	4345-4350	4350-4355	4355-4360	4360-4365	4365-4370	4370-4375	4375-4380	4380-4385	4385-4390	4390-4395	4395-4400	4400-4405	4405-4410	4410-4415	4415-4420	4420-4425	4425-4430	4430-4435	4435-4440	4440-4445	4445-4450	4450-4455	4455-4460	4460-4465	4465-4470	44

TABLE II. Weekly Register of Deaths in the County Borough of Birkenhead for the Year ending December 31st, 1899.

[illegible]

NOTE.—The weeks end January 7th, 14th, 21st, &c., the last week in the year includes two days extra.

TABLE II.—Weekly Register of Deaths in the County Borough of Birkenhead for the Year ending December 31st, 1899.

[illegible]

NOTE.—The weeks end January 7th, 14th, 21st, &c., the last week in the year includes two days extra.

TABLE III.—Weekly Condensed Register of Deaths for 1899.

CAUSES OF DEATH.	WEEKS.													WEEKS.													WEEKS.													4TH YEAR																				
	1ST													2ND													3RD														Qr.																			
	WEEKS.													WEEKS.													WEEKS.																																	
	1	2	3	4	5	6	7	8	9	10	11	12	Qr.	14	15	16	17	18	19	20	21	22	23	24	25	26	Qr.	27	28	29	30	31	32	33	34	35	36	37	38			39	Qr.	40	41	42	43	44	45	46	47	48	49	50	51	52	Qr.			
Borough of Birmmhead.	All Causes	32	42	37	40	50	43	56	45	56	49	55	51	55	611	44	38	35	38	40	39	47	28	34	40	35	30	25	476	32	30	51	47	43	41	49	59	53	41	39	57	40	582	40	30	37	49	40	42	31	54	36	37	31	50	68	545	2214		
	Specified Causes ..	32	42	37	40	50	43	56	45	56	49	55	51	55	611	44	38	35	38	40	39	47	28	34	40	35	30	28	475	32	30	51	47	43	41	49	58	53	41	39	57	40	581	40	30	37	49	40	42	31	54	36	37	31	50	68	545	2212		
	I.—Zymotic Diseases	4	6	5	4	2	3	12	10	13	8	6	9	8	9	89	61	4	5	12	8	9	10	8	3	10	8	6	7	61	4	5	12	8	9	10	8	3	10	8	6	7	101	3	5	6	11	8	10	7	5	4	5	7	6	4	77	398	378	
	II.—Constitutional Diseases ..	10	6	5	13	7	5	8	9	7	10	8	7	10	9	102	4	5	10	5	8	9	8	11	6	6	7	5	89	2	3	8	7	8	5	10	9	10	8	4	11	7	92	4	6	11	8	10	7	11	7	8	5	3	8	5	9	8	5	378
	III.—Local Diseases ..	12	21	23	13	32	31	28	20	29	27	31	27	33	329	26	18	11	17	21	22	23	13	24	18	16	15	933	23	14	21	27	21	25	24	33	21	17	15	25	20	286	22	18	21	16	19	14	28	15	17	11	29	4	269	1117				
	IV.—Developmental Diseases	6	8	4	6	2	8	3	5	7	8	6	7	14	14	7	5	6	4	6	12	2	3	4	5	5	73	3	8	5	6	7	5	8	7	10	11	5	90	11	8	5	8	6	5	6	6	4	10	9	88	398								
	V.—Violent Deaths ..	2	2	2	2	3	2	3	3	1	1	1	1	1	14	4	4	2	2	1	1	2	2	1	1	2	1	2	19	1	1	1	1	1	1	1	1	1	2	1	1	12	1	1	3	1	1	1	1	1	2	3	16	61						
Cleveland, Cloughton, Grange and Argyle Wards.	All Causes	16	26	16	24	31	31	29	26	34	30	37	32	30	362	23	24	19	23	26	26	28	17	22	25	20	18	21	292	19	19	36	31	30	24	30	40	32	24	25	31	27	368	31	18	19	26	23	23	16	29	20	14	37	316	1388				
	Specified Causes ..	16	26	16	24	31	31	29	26	34	30	37	32	30	362	23	24	19	23	26	28	17	22	24	20	18	21	292	19	19	36	31	30	24	30	40	32	24	25	31	27	368	31	18	19	26	23	23	16	29	20	14	37	316	1387					
	I.—Zymotic Diseases ..	4	3	4	3	1	2	8	5	10	4	2	4	54	54	3	4	3	7	5	3	3	1	3	1	3	1	39	2	1	3	10	5	8	6	3	6	5	5	3	5	6	385	3	5	4	6	6	4	3	3	4	3	3	48	209	243			
	II.—Constitutional Diseases ..	6	2	6	4	3	6	6	5	2	9	4	2	57	57	2	3	5	3	5	5	6	8	4	4	3	3	140	13	9	12	7	4	5	1	5	7	3	1	2	3	49	3	2	3	6	5	3	2	6	5	3	2	6	53	213				
	III.—Local Diseases ..	3	13	9	9	22	12	12	15	20	22	18	19	196	12	10	4	9	16	14	13	7	10	15	9	12	13	140	13	9	12	13	19	12	15	15	15	12	11	9	11	18	16	183	17	6	10	8	9	11	8	16	13	10	4	22	2	156	675	
	IV.—Developmental Diseases	3	6	1	5	4	2	3	2	3	4	5	5	47	5	6	3	5	2	3	8	..	2	2	3	3	3	45	2	5	3	4	5	4	6	6	6	8	6	3	63	8	5	1	5	3	3	2	3	1	3	3	8	48	203					
	V.—Violent Deaths ..	2	2	1	1	2	3	1	1	1	1	1	1	8	2	2	1	2	1	1	1	1	1	2	1	1	1	13	1	1	1	1	1	1	1	1	1	1	2	1	5	1	3	..	1	1	1	1	1	2	3	11	37							
Oxton, Egerton, Clifton and Mersey Wards.	All Causes	12	11	14	12	13	10	20	14	15	14	10	13	20	178	17	10	14	7	10	10	15	5	9	10	9	7	6	129	11	6	12	11	9	14	16	14	15	12	9	20	11	160	5	11	17	15	13	12	9	17	10	15	12	6	19	161	698		
	Specified Causes ..	12	11	14	12	13	10	20	14	15	14	10	13	20	178	17	10	14	7	10	10	15	5	9	10	9	7	6	129	11	6	12	11	9	14	16	13	15	12	9	20	11	159	5	11	17	15	13	12	9	17	10	15	12	6	19	161	697		
	I.—Zymotic Diseases ..	2	1	1	1	1	3	5	3	3	5	3	5	31	21	2	2	2	2	2	1	1	1	1	1	1	1	17	2	2	2	3	..	4	3	5	3	3	2	3	3	2	3	3	1	4	1	5	2	3	1	25	105	105						
	II.—Constitutional Diseases ..	3	2	5	1	1	1	2	4	1	2	3	29	12	4	2	4	3	2	1	1	1	1	1	1	1	1	22	1	1	2	2	4	1	2	4	1	2	2	6	3	28	1	1	2	3	5	4	1	1	3	1	25	105						
	III.—Local Diseases ..	7	5	8	4	6	8	11	5	9	4	5	11	87	10	4	6	3	4	5	8	3	7	5	2	2	21	6	1	6	4	6	9	7	8	6	4	3	4	69	2	6	8	9	5	4	3	10	5	6	3	12	78	235						
	IV.—Developmental Diseases	2	2	3	1	2	5	1	1	3	2	3	1	26	3	1	2	1	1	3	4	..	3	2	1	1	1	1	2	1	2	3	2	1	1	1	1	1	1	1	5	2	2	3	4	2	1	1	3	2	1	6	28	101						
	V.—Violent Deaths	1	3	..	1	5	..	2	..	2	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21					
Bebington Ward.	All Causes	2	1	1	2	1	3	2	1	1	14	14	1	1	1	1	1	4	4	..	1	1	1	1	1	1	1	1	1	1	1	1	8	..	3	..	1	..	2	3	2	11	37								
	Specified Causes ..	2	1	1	2	1	3	2	1	1	14	14	1	1	1	1	1	4	4	..	1	1	1	1	1	1	1	1	1	1	1	8	..	3	..	1	..	2	3	2	11	37									
	I.—Zymotic Diseases	3	1	6	3						
	II.—Constitutional Diseases	1	1	1	3						
	III.—Local Diseases ..	2	..	1	1	2	1	1	1	1	10	1	7	24						
	IV.—Developmental Diseases	1	1	2	2						
	V.—Violent Deaths	1	1	2	2						
Union Hospital.	All Causes	2	4	7	3	6	2	7	3	6	2	6	5	4	57	4	4	2	8	4	3	4	5	2	4	5	5	51	5	2	5	2	4	3	2	3	4	6	5	5	4	1	46	4	1	1	5	4	7	5	8	3	2	3	4	10	57	211		
	Specified Causes ..	2	4	7	3	6	2	7	3	6	2	6	5	4	57	4	4	2	8	4	3	4	5	2	4	5	5	51	5	2	5	2	4	3	2	3	4	6	5	4	1	46	4	1	1	5	4	7	5	8	3	2	3	4	10	57	211			
	I.—Zymotic Diseases	1	12	8	57					
	II.—Constitutional Diseases ..	1	1	1	2	2	1	1	1	1	1	1	2	2	16	..	1	1	2	..	1	1	1	1	1	1	1	12	1	16	57				
	III.—Local Diseases ..	3	6	1	4	1	5	2	4	1	4	3	2	36	4	4	1	5	1	3	2	3	2	3	2	3	2	31	3	2																														

TABLE V.

LUNAR MONTHLY TABLE OF DEATHS from all Causes and Zymotic Diseases, with the Rates per 1,000 inhabitants per annum.

1899					No. of Deaths from All Causes,	Annual Rate per 1,000 Living.	No. of Deaths from Zymotic Diseases.	Annual Rate per 1,000 Living.
1st	Month ending	January 28th	..	..	151	17.1	19	2.15
2nd	"	February 25th	..	..	194	22.05	27	3.06
3rd	"	March 25th	..	..	211	23.9	34	3.86
4th	"	April 22nd	..	..	172	19.5	28	3.18
5th	"	May 20th	..	..	164	18.6	20	2.27
6th	"	June 17th	..	..	137	15.5	16	1.81
7th	"	July 15th	..	..	120	13.6	15	1.70
8th	"	August 12th	..	..	182	20.6	31	3.52
9th	"	September 9th	..	..	202	22.9	40	4.54
10th	"	October 7th	..	..	176	20.0	24	2.73
11th	"	November 4th	..	..	156	17.7	28	3.18
12th	"	December 2nd	..	..	163	18.5	24	2.73
13th	"	(plus 2 days extra) ending Dec. 31st	..	..	186	20.5	22	2.41
Total					2214	19.3	328	2.86

TABLE VI.

STREET REGISTER OF DEATHS.

A.—CLEVELAND, CLAUGHTON, GRANGE AND ARGYLE WARDS.

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Abbey street	3	0	Brimstage street ..	1	0
Abbey terrace	1	0	Brook place	4	1
Abbot street	5	0	Brook street	44	5
Ackworth place	1	0	Broom Hill	1	0
Adelphi street	4	0	Brunswick avenue ..	3	0
Albert terrace	2	1	Cambridge place ..	8	1
Albion street	3	0	Camden street	9	1
Albion terrace	5	2	Campbell terrace ..	2	0
Alexandra road	1	0	Camperdown street ..	1	0
Alfred road	1	0	Canning street	1	0
Alma street	1	0	Cannon hill	1	0
Alvanley place	1	0	Cardigan street ..	1	1
Anglesey terrace ..	1	0	Carlisle street	3	0
Argyle street	4	1	Carnforth street ..	5	1
Arrow place	2	0	Carnforth terrace ..	1	0
Arthur street	4	0	Carpenter's row ..	5	1
Ashville road	1	0	Castle buildings ..	3	0
Athol street	1	1	Cathcart street ..	15	3
Austin street	3	0	Catherine street ..	1	0
Back Camden street ..	1	1	Cavendish street ..	1	0
Back Myrtle street ..	4	0	Challis street	1	0
Back Oliver street ..	2	1	Chapel street	6	1
Back Price street ..	3	0	Chester place	1	0
Back St. Anne street ..	10	4	Chester street	5	1
Balls road east	5	1	Christchurch road ..	3	1
Banning street	3	1	Church street	7	0
Barnard road	1	0	Clarendon street ..	6	1
Barnston street	3	1	Claughton firs	1	0
Beaufort road	1	0	Claughton place ..	1	0
Beckwith street	42	6	Claughton road	17	3
Belmont	1	0	Clayton street	2	0
Bentinck place	2	0	Cleveland avenue ..	7	1
Bentinck street	12	1	Cleveland street ..	25	5
Berner street	1	0	Clifton crescent ..	2	0
Berry street	1	1	Clwyd street	1	0
Bertha street	4	0	Coburg street	2	0
Bessborough road ..	1	0	Collingwood street ..	3	0
Birkenhead & Wirral			Conway place	1	0
Children's Hospital ..	4	1	Conway street	13	1
Blackpool street	1	0	Corfu street	1	0
Borough Hospital ..	8	2	Corporation road ..	3	1
Brassey street	5	1	Cottage street	6	1
Brattan road	2	0	Craven place	1	0
Bray street	2	0	Craven street	6	1
Briardale road	7	1	Crown street	4	0
Bridge street	9	0	Cumberland place ..	1	1
Bright street	6	1	Cyprus street	2	1

TABLE VI.—*Continued.*

STREETS.	Total from all Causes.	From Zymotic Diseases only	STREETS.	Total from all Causes.	From Zymotic Diseases only
Dacre street ..	9	2	Hamilton lane ..	1	0
Davies street ..	3	2	Hamilton square ..	5	1
Derby street ..	7	2	Hampton street ..	4	1
Devonshire place ..	1	0	Harriet street ..	2	0
Devonshire road ..	5	0	Henry street ..	2	0
Dover street ..	2	1	Henthorne street ..	1	0
Duke street ..	4	1	Herbert place ..	3	0
Duncan street ..	3	0	Hilton street ..	4	0
Eagle court ..	1	0	Hind street ..	1	0
Eastbourne road ..	3	0	Hinson street ..	1	0
Eastham street ..	2	0	Hope street ..	4	0
Edgar street ..	4	1	Horatio street ..	1	0
Egerton street ..	1	1	Howard street ..	2	0
Eldon place ..	9	1	Howe street ..	2	0
Eldon street ..	3	0	Hughes' buildings ..	2	0
Elgin street ..	3	0	Huskisson street ..	5	2
Elizabeth place ..	2	1	Infectious Diseases		
Elizabeth street ..	2	1	Hospital ..	1	1
Eln street ..	1	0	Ivy bank ..	1	0
Erskine street ..	1	0	Ivy court ..	2	2
Euston grove ..	2	0	Ivy street ..	6	0
Evan's court ..	1	0	Jackson street ..	4	0
Evan's place ..	2	0	Keightley street ..	2	1
Exmouth street ..	7	2	Kent place ..	4	0
Field street ..	2	0	King's mount ..	3	0
Flamank street ..	10	0	Kimmel street ..	2	0
Flint street ..	6	0	Knowles street ..	1	1
Florence street ..	2	1	Laird street ..	10	1
Fore street ..	5	1	Lansdowne road ..	4	2
Forest road ..	1	0	Laxey terrace ..	2	0
Fox street ..	9	2	Lea street ..	1	0
Frederick street ..	9	2	Leicester street ..	8	0
Garfield place ..	1	0	Leinster street ..	1	1
Garnet street ..	3	0	Leta street ..	3	0
George street ..	6	1	Lingdale road ..	3	2
German terrace ..	1	0	Lingdale road north ..	1	0
Gladstone street ..	9	1	Livingstone street ..	10	2
Glover street ..	5	1	Lord street ..	5	0
Gomer street ..	2	0	Lorn street ..	5	1
Gore street ..	1	0	Lower Ivy street ..	1	0
Grace street ..	3	0	Lowther street ..	7	3
Grafton street ..	1	0	Maddock street ..	2	0
Grange mount ..	2	0	Malta street ..	2	0
Grange place ..	1	0	Marion grove ..	2	1
Grange road ..	9	2	Marion street ..	4	2
Grange road west ..	2	0	Market place south ..	1	0
Grange street ..	2	0	Market street ..	12	2
Greenfield street ..	1	1	Market street (court) ..	1	0
Halcyon road ..	2	0	Marlborough grove ..	2	0
Halkin street ..	1	1	Marshall place ..	2	1

TABLE VI.—*Continued.*

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Mather road	3	0	Pinces ter., Grange rd.	2	0
Meadow street	5	1	Priory court	4	0
Menai street	4	0	Priory street	4	0
Mersey place	1	0	Pym street	5	0
Mersey street	1	1	Quarry bank place ..	4	3
Merton place	1	0	Queen's buildings ..	17	2
Midland street	5	0	Queensbury street ..	6	1
Miller's place	2	2	Ravenscroft road ..	1	0
Milton street	5	3	Robert street	5	0
Mona street	2	1	Roe street	1	0
Monk street	1	0	Romilly street	1	0
Moon street	8	1	Rose street	4	0
Mornington street ..	5	0	Rowland street	3	0
Morpeth buildings ..	8	4	Rushton's court	4	1
Morpeth Dock	1	0	Russell place	3	0
Mortimer street	1	0	St. Anne street	26	4
Mount grove	3	1	St. Anne's terrace ..	2	1
Munster street	4	0	St. Mary's avenue ..	2	0
Myrtle place	1	1	St. Mary's gate	5	1
Myrtle street	1	0	St. Mary's street ..	1	0
Napier street	3	1	Salisbury street	10	2
Nelson street	4	3	Saxon street	2	0
Neptune street	2	0	School place	3	1
Neston street	4	0	Shaw's terrace	2	1
Newton street	2	0	Sidney street	1	0
Oakfield view	4	1	Simpson street	1	0
Oak street	12	1	Slatey road	1	0
Old Bidston road ..	11	2	Somerville street ..	6	0
Oliver place	2	0	Stanley court	1	0
Oliver street	24	5	Stanley road	1	0
Orderly avenue	2	0	Stewart street	1	0
Orderly place	3	2	Stoke street	3	1
Oxton road	6	1	Sun street	6	1
Parkfield avenue ..	26	0	Sussex street	4	1
Parkfield place	4	1	Taylor's buildings ..	4	1
Park road east	3	1	Taylor street	2	0
Park road north	1	0	Thomas street	9	1
Park road south	2	0	Tunnel road	1	0
Park road west	1	0	Turner street	1	0
Park street	9	1	Unknown	2	0
Paterson street	12	0	Upper Beekwith street	2	0
Patten street	1	0	Upton road	2	0
Payson street	14	2	Vernon place	1	0
Payson terrace	1	0	Viear's court	2	0
Penrith street	2	0	Vincent street	1	0
Pensby street	2	2	Vine street	10	2
Pilgrim street	2	0	Vittoria street	3	0
Pleasant street	6	2	Vittoria Wharf	2	0
Price street	42	5	Vulcan street	5	1
Princes ter., Balls rd.	1	0	Walla-ey Dock	3	0

TABLE VI.—*Continued.*

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Walton street ..	3	2	Wilbraham terrace ..	2	0
Warwick street ..	4	1	Wilkinson street ..	9	1
Waterloo place ..	4	0	Willaston place ..	3	0
Watson street ..	10	0	William street ..	6	2
Wellesley street ..	1	0	Wilson street ..	3	1
Westbourne road ..	11	0	Windsor street ..	4	0
West Float ..	1	0	Wirral street ..	2	0
Westminster road ..	1	1	Woodchurch road ..	2	0
Whetstone view ..	2	0	Wood street ..	17	3
White street ..	7	4	Woodville road ..	7	3

TABLE VI.—*Continued.*

B.—OXTON, EGERTON, CLIFTON AND MERSEY WARDS.

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Adelaide road	1	0	Dial road	1	1
Albert place	3	0	Earl street	5	1
Alison street	3	1	Ebenezer street ..	6	0
Allerton grove	1	0	Eldon road	2	0
Alton road	1	0	Elm grove	3	0
Argyle street south ..	6	2	Elmswood road ..	2	0
Arno road	1	0	Fairfax road	2	0
Arnside road	1	0	Fairfield road ..	2	0
Ashley street	2	2	Fairview road ..	1	0
Back Pitt street	1	1	Farm road	5	1
Back Portland street ..	3	1	Fearnley road ..	1	0
Beaconsfield road ..	3	0	Fountain street ..	3	1
Bebington road	3	0	Gerald road	1	0
Bedford place	4	2	Gladstone road ..	4	0
Bedford road	5	0	Glasgow street ..	1	1
Beech road	1	0	Greenbank road ..	1	0
Beech view	1	0	Green lane	5	2
Bercstord road	2	0	Greenway road ..	3	0
Bidston road	2	0	Grenville road ..	3	1
Birch road	1	1	Grosvenor street ..	6	0
Blucher street	3	0	Grove mount	1	0
Bold street	5	2	Grove road	7	1
Booth street	4	0	Haddon road	1	0
Borough road	29	5	Hall's yard	1	0
Brougham street	9	1	Hampden grove ..	1	1
Brunswick street	4	0	Hampden street ..	1	0
Bulwer street	1	0	Harland road	1	0
Buxton road	1	0	Hawthorne cottages	3	1
Caerwys grove	2	0	Hawthorne road ..	1	0
Carlton mount	1	0	Heath bank road ..	1	1
Cearns road	2	0	Heathfield road ..	1	0
Cedar street	3	0	Helmingham road ..	2	0
Chamberlain street ..	1	0	Hinderton road ..	8	3
Chapel place	1	0	Holborn hill	5	2
Chapel square	2	1	Holly bank road ..	3	1
Charlecomb street ..	1	0	Holme lane	2	0
Chatham road	3	0	Holt hill	6	0
Church road	11	1	Holt hill terrace ..	1	0
Church terrace	1	0	Holt road	11	3
Clare street	1	0	Holt terrace	1	0
Clifton road	2	0	Hope terrace	1	1
Cobden place	2	0	Houlden's place ..	1	0
Cobden street	9	0	Howson street ..	6	1
Combermere terrace ..	4	2	Hughes' cottages ..	3	1
Comet street	1	0	Keillett's place ..	1	0
Der street	2	1	Kingsdown street ..	2	0
Derby road	3	0	Kingsland road ..	2	0

TABLE VI.—*Continued.*

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Kingsmead road south	1	0	Randle street ..	2	1
Larch road ..	3	0	Rhoden's place ..	2	0
Laurel road ..	1	1	Rocky bank road ..	1	0
Leighton road ..	1	1	Rodney street ..	11	0
Lever terrace ..	1	0	Roseberry grove ..	1	0
Liversidge road ..	5	1	Rose mount ..	1	0
Livingstone road ..	7	1	Rose place ..	2	1
Lorne road ..	2	0	Roslyn street ..	5	2
Lowwood grove ..	1	0	Russell cottages ..	1	0
Lowwood road ..	1	0	Russell road ..	5	1
Lunar street ..	2	0	St. Paul's place ..	3	1
Maple street ..	1	0	St. Paul's road ..	5	1
Meadow lane ..	3	0	Sea bank cottages ..	1	0
Medway road ..	5	3	Seymour street ..	3	0
Mellor road ..	1	0	Shaw street ..	3	3
Mersey road ..	8	0	Shrewsbury road ..	3	0
Meteor street ..	1	0	Sidney buildings ..	2	1
Mill street ..	10	1	Sidney road ..	3	0
Milton road ..	3	0	Sidney terrace ..	2	0
Mollington street ..	1	0	South bank ..	1	0
Moss lane ..	1	1	Southwick road ..	1	0
Mount Pleasant ..	1	0	Standard place ..	1	0
Mount street ..	2	0	Stanley street ..	4	0
Mulberry road ..	4	0	Star street ..	3	1
Newburn's lane ..	2	1	Stewart's place ..	4	0
New Chester road ..	11	2	Storeton road ..	1	0
North road ..	3	0	Taylor's delph ..	2	0
Oak tree place ..	5	2	The Woodlands ..	7	0
Oak tree terrace ..	5	1	Thompson street ..	2	0
Old Chester road ..	14	3	Tower hill ..	1	0
Olive crescent ..	1	0	Tower road ..	1	0
Olive mount ..	2	0	Tudor road ..	5	1
Orchard road ..	1	0	Union street ..	4	2
Oriel road ..	5	2	Unknown ..	4	0
Park grove ..	1	0	Victoria mount ..	1	0
Peel street ..	17	6	Victoria road ..	8	0
Percy place ..	2	0	Village road ..	1	0
Pitt street ..	9	2	Village terrace ..	1	1
Planet street ..	3	0	Walker place ..	1	1
Prenton road west ..	3	0	Walker street ..	2	1
Price's lane ..	2	1	Warrington street ..	1	0
Princes place ..	4	0	Waverley grove ..	1	0
Queen's buildings ..	4	0	Wellington road ..	1	0
Queen's place ..	3	1	Wellington terrace ..	3	0
Queen street ..	3	0	Well lane ..	2	0
Quigley street ..	1	0	West bank road ..	3	1
Raffles road ..	2	0	Westbury street ..	1	0
Railway road ..	1	0	West view ..	4	0

TABLE VI.—*Continued.*

STREETS.	Total from all Causes	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Whalley road	1	0	Woburn place	1	0
Whetstone lane	5	2	Woodchurch lane	5	1
Whitfield street	6	1	Woodland avenue	1	0
Whitford road	6	0	Woodland terrace	5	2
Willmer road	7	1	Wycliffe street	7	1
Willow bank road	1	0	Wye street	2	0
Willy street	1	0			

TABLE VI.—*Continued.*

C.—BEBINGTON WARD.

STREETS.	Total from all Causes.	From Zymotic Diseases only.	STREETS.	Total from all Causes.	From Zymotic Diseases only.
Derby park	1	0	Reform. ship "Akbar" ..	1	0
Highfield grove north ..	1	0	" " "Clarence" ..	2	1
Highfield north	1	0	Rock lane west	2	1
Highfield south	2	0	Rock park	7	0
King street	1	0	Rock Slip	1	0
Mersey lane south	2	0	School ship "Conway" ..	1	1
Nelson place	1	0	Sefton road	1	0
Nelson road	5	2	Woodlands grove	1	0
New Chester road	1	1	Woodlands road	1	0
Old Chester road	4	0			

SUPPLEMENT TO TABLE VI.

RETURN OF DEATHS in Birkenhead Union Hospital and Workhouse during 1899.

Date.	Sex.	Age	Occupation &c.	Cause of Death.	Date and Address of Deceased when admitted.
Jan. 1	M	79	Tailor	Senile decay ..	29-8-94 11 William street
5	M	6	Painter's son ..	Tub. meningitis ..	1-12-98 10 Apple grove
7	M	42	Cotton porter ..	Aneurism ..	23-8-97 25 Clarendon street
9	M	62	Seaman ..	Apoplexy ..	14-4-97 20 Craven place
11	M	23	do. ..	Empyema ..	13-12-98 S.S. Orcaua
11	M	75	Furniture dealer	Intest. obstruct.	10-1-99 18 Rodney street
16	M	38	Labourer ..	Pneumonia ..	14-1-99 32 Grange road
17	M	66	Metal planer ..	Apoplexy ..	16-1-99 238 Beckwith street
17	F	28	.. ..	Phthisis ..	27-12-98 3 Albion terrace
17	M	62	Labourer ..	Morbus cordis ..	20-3-91 15 Brook place
18	F	43	Shoeing-smith's wif	Heart disease ..	6-1-99 196 Oliver street
18	F	39	Superannuated Postal clerk's wife	Cardiac asthma ..	18-1-99 36 Derby road
19	F	71	Labourer's widow	Heart disease ..	26-4-94 Transf from M'hester
20	M	67	Labourer ..	Cancer ..	12-10-89 Egerton street
23	F	35	Labourer's wife ..	Phthisis ..	8-11-98 41 Flamank street
24	M	35	Joiner ..	Nephritis ..	30-12-98 5 Alma street
28	F	66	Charwoman ..	Pneumonia ..	31-10-98 42 Payson street
29	M	68	Master mariner ..	Asthma ..	8-7-98 17 Harland road
30	M	42	Theatrical agent	Phthisis ..	28-1-99 86 Oliver street
30	M	61	Blacksmith ..	Enteritis ..	26-1-99 14 St. Mary's gate
31	M	40	Lighterman ..	Phthisis ..	24-12-98 11 Laxey terracc
Feb. 1	F	74	Plasterer's widow	Bronchitis ..	21-6-95 2 Wilton street
7	M	43	Labourer ..	Phthisis ..	19-1-99 12 Waterloo place
8	M	67	do ..	Heart disease ..	29-5-97 12 Waterloo place
10	M	53	Iron driller ..	Nephritis ..	8-2-99 160 New chester road
11	F	33	Q'rterm'str's da.	Phthisis ..	17-8-98 11 Thompson street
11	F	41	Labourer's daugh.	Bronchitis ..	9-2-99 18 Hope street
12	M	40	Clerk ..	Insanity ..	4-5-98 20 Halcyon road
13	F	28	Labourer's widow	do. ..	13-4-98 20 St. Mary's gate
14	M	63	Labourer ..	Syphilis ..	18-3-96 285 Brook street
16	M	66	do. ..	Heart disease ..	28-5-95 210 Chester street
18	M	35	do. ..	Phthisis ..	12-10-98 3 Metcor street
20	M	63	do. ..	Bronclutis ..	7-10-98 12 Waterloo place
24	M	52	Ship plater ..	Insanity ..	26-1-99 1 Sycamore road
25	M	62	Clerk ..	Heart disease ..	20-8-94 43 Ivy street
26	M	76	Labourer ..	Senile decay ..	13-10-92 7 Albert terrace
26	M	63	do. ..	Dementia ..	8-12-96 27 G Queen's bldgs.
27	M	58	Gas inspector ..	Bronchitis ..	23-2-99 19 Turner street
Mar. 2	M	38	Shoemaker ..	Pneumonia ..	17-2-99 Tranmere
3	M	54	Labourer ..	Phthisis ..	3-12-98 3 Sussex street
5	F	56	Boilermaker's wife	Ulcer ..	13-1-98 171 Bridge street
7	M	27	Pensioner ..	Phthisis ..	30-1-99 127 St. Anne street
11	M	80	Labourer ..	Pneumonia ..	4-3-99 78 Earl street
12	M	42	do ..	Pleurisy ..	24-2-99 49 Bentinck street
12	F	82	Labourer's widow	Senile decay ..	4-9-93 34 Pleasant street
13	M	69	Labourer ..	do. ..	12-3-86 4 Abbot street

SUPPLEMENT TO TABLE VI.—Continued.

Date.	Sex.	Age	Occupation &c.	Cause of Death.	Date and Address of Deceased when admitted.
Mar 16	M	70	Hawker	Bronchitis ..	13-12-98 6 Waterloo place
16	F	65	Domestic servant	do. ..	24-2-99 25 Barnston street
19	F	36	Fireman's wife ..	Phthisis ..	27-2-99 40 Mill street
19	F	81	Shipbuilder's wid	Heart disease ..	14-2-99 10 Moreton street
20	M	40	Labourer.. ..	Pneumonia ..	18-3-99 9 Walton street
22	M	41	do.	Brain disease ..	14-3-99 9 Waterloo place
23	M	22	do.	Tuberculosis ..	4-3-99 210 Chester street
26	M	68	Gardener	Heart disease ..	25-3-99 48 Brassey street
28	M	40	Engine driver ..	Phthisis ..	13-2-99 13 Cambridge place
28	F	22	Labourer's wife ..	do. ..	6-3-99 2 Pym street
31	F	73	Labourer's widow	Heart disease ..	14-5-98 154 Beckwith street
April 4	F	75	Fisherman's wid	do. ..	11-2-99 39 Thomas street
4	M	60	Shipwright ..	Nephritis ..	4-2-99 28 Pool street
4	F	73	Labourer's wife ..	Heart disease ..	4-4-99 2 Broom hill
7	F	73	Cabdriver's widow	Apoplexy ..	24-12-99 47 Clarendon street
12	M	65	Cotton porter ..	Cystitis ..	6-4-98 81 Briardale road
12	F	41	Labourer's wife ..	Heart disease ..	10-4-99 25 Back Portland st.
12	M	63	Warehouseman ..	Insanity ..	9-3-97 189 Borough road
14	M	60	Shoemaker	Heart disease ..	5-4-99 105 Back Price street
15	F	63	Assur. agents wid	do. ..	23-7-98 40 Grosvenor street
20	F	71	Soldier's widow ..	Cancer ..	26-3-88 54 Egerton street
26	F	60	Butler's widow ..	Arthritis ..	27-1-99 97 Greenway road
26	M	39	Tool grinder ..	Pneumonia ..	24-4-99 210 Chester street
26	M	77	Tailor	Heart disease ..	26-7-97 8 Carlisle street
27	F	20	Domestic servant	Puerperal fever	3-4-99 16 Meadow lane
28	M	2	Labourer's son ..	Tub. meningitis	26-11-98 82 Market street
28	F	54	do. widow	Cirrhosis of liver	11-4-99 15 Back St. Anne st.
25	F	65	do. do.	Fracture of thigh	26-1-99 25 Up. Beckwith st.
26	F	67	do. do.	Uræmia ..	17-4-99 1 h. 2t. Payson st.
May 2	M	46	Carter	Phthisis ..	28-4-99 12 Waterloo place
2	F	44	Stone quar. widow	Periph. neuritis	25-3-99 53 Livingstone road
3	F	63	Bootmaker's wid	Heart disease ..	27-4-99 21 Carnforth street
4	M	85	Labourer.. ..	Cancer ..	19-1-98 14 Oakfield view
10	F	38	Labourer's widow	Bronchitis ..	9-5-99 22 Hope street
11	M	80	Bootmaker	Heart disease ..	7-4-99 9 H Queon's bldgs.
12	F	20	Town clerk's dau	do. ..	17-4-99 16 Grenville road
14	F	35	Labourer's wife ..	Phthisis ..	8-5-99 2 Hamilton view
16	F	40	Joiner's widow ..	do. ..	24-4-99 19 Taylor's buildings
18	M	68	Gardener	Pneumonia ..	9-3-99 75 Market street
18	M	53	Carter	Aneurism ..	8-4-99 325 Cleveland street
22	F	73	Labourer's widow	Apoplexy ..	11-1-99 Mere Farm
23	M	77	Baker	Senile decay ..	2-6-96 24 Egerton street
23	M	58	Labourer.. ..	Heart disease ..	1-5-99 39 Brunswick street
24	F	63	Carpenter's widow	do. ..	12-5-99 6 William street
24	F	49	Steward's widow	Phthisis ..	20-5-99 14 Flamank street
26	M	23	Organ grinder ..	do. ..	21-4-99 4 Watson street
26	F	16	Domestic servant	Enteric fever ..	22-4-99 2 St. Paul's road
June 5	F	37	Elec. engin'rs wife	Spinal disease ..	21-6-98 5 Prenton road east
6	M	61	Labourer.. ..	Phthisis ..	17-11-98 7 Cambridge place
7	M	56	do.	Dysentery ..	26-7-99 3 Mason's court
10	F	48	Iron-dresser's wife	Apoplexy ..	6-4-99 15 Vicar's court
10	F	3	Labourer's daugh.	Whooping cough	8-6-99 11 Howard street

SUPPLEMENT TO TABLE VI.—*Continued.*

Date.	Sex.	Age	Occupation &c.	Cause of Death.	Date and Address of Deceased when admitted.
Jun 12	M	21	Labourer's son ..	Insanity ..	13-4-98 38 Derby street
13	F	52	Porter's wife ..	Cirrhosis of liver ..	4-5-99 50 Oriel road
14	M	60	Labourer ..	Aneurism ..	17-9-97 13 Ivy street
14	F	32	Labourer's wife ..	Phthisis ..	12-6-99 15 Flamank street
19	M	28	Quartermaster ..	Meningitis ..	16-6-99 34 Elgin street
19	F	89	Labourer's widow ..	Senile decay ..	21-9-98 5 Wilson street
18	F	33	Shipsmith's wife ..	Phthisis ..	17-5-99 1 Exmouth street
22	F	33	Labourer's wife ..	Pneumonia ..	13-6-99 51 Flamank street
23	M	30	Labourer ..	Phthisis ..	18-6-99 46 Mill street
27	F	72	Labourer's widow ..	Heart disease ..	18-6-99 7 Howard street
July 1	F	39	Iron planer's wife ..	Pneumonia ..	26-6-99 26 Vine street
5	F	46	Butcher's wife ..	Insanity ..	22-11-98 11 Clare street
7	M	69	Labourer ..	Heart disease ..	23-5-99 4 Hamilton view
6	M	67	do. ..	Nephritis ..	20-4-94 32 Grange road
11	F	58	Labourer's wife ..	Senile decay ..	22-3-92 14 Oak street
11	M	30	Butcher ..	Meningitis ..	4-7-99 Watson street
13	M	64	Labourer ..	Heart disease ..	1-7-99 108 Oliver street
14	F	5	Labourer's daugh. ..	do. ..	10-10-98 20 Flamank street
18	M	35	Painter ..	Pneumonia ..	16-7-99 12 Burton street
22	M	28	Labourer ..	Heart disease ..	18-7-99 8 Sun street
24	F	67	Shipwright's wife ..	Paralysis ..	14-12-99 31 Henry street
24	F	41	—widow ..	do. ..	19-4-94 34 Argyle street
25	F	7	Labourer's daugh. ..	Tuberculosis ..	10-7-99 4 Ivy court
29	M	32	Baker ..	Phthisis ..	31-5-99 43 Farm road
30	F	17	Labourer's daugh. ..	Heart disease ..	28-2-99 40 St. Anne street
Aug. 3	M	56	Labourer ..	Paralysis ..	11-4-99 104 Cathcart street
6	M	52	Hawker ..	Phthisis ..	11-7-99 126 Market street
9	F	39	Labourer's wife ..	Heart disease ..	29-7-99 49 Ivy street
11	M	52	Labourer ..	Phthisis ..	14-7-99 22 School place
12	M	58	Boilermaker ..	Paralysis ..	10-8-99 363 Price street
15	M	30	Coalheaver ..	Pneumonia ..	5-8-99 177 Peel street
21	M	42	Com. traveller ..	Phthisis ..	29-6-99 6 Waterloo place
22	M	61	Carter ..	Senile decay ..	23-6-96 383 Brook street
22	F	3 m.	Dressmaker's dau. ..	Enteritis ..	11-5-99 Workhouse
22	M	27	Plumber ..	Pneumonia ..	16-8-99 61 Borough road
29	F	40	Labourer's wife ..	Periph. neuritis ..	1-7-99 1 Back St. Anne st.
26	F	19	do. daugh. ..	Phthisis ..	19-12-98 Resc hom. Euston gr
28	F	70	Domestic servant ..	Paralysis ..	5-8-99 83 Bentinck street
29	F	50	Seaman's widow ..	Bronchitis ..	10-7-99 103 Back Price street
30	M	58	Labourer ..	do. ..	30-8-99 32 Grange road
Sept. 1	F	36	Painter's wife ..	Endocarditis ..	22-8-99 17 Taylor's buildings
4	M	31	Boilermaker ..	Enteric fever ..	21-8-99 52 Eldon street
3	F	46	Labourer's wife ..	Phthisis ..	4-7-98 216 Beckwith street
4	M	5 m.	Laundress' son ..	Enteritis ..	2-9-99 41 Salisbury street
7	F	2 m.	Dom. serv. daugh. ..	Tuberculosis ..	22-6-99 Workhouse
9	M	6 m.	do. son ..	Enteritis ..	18-2-99 Workhouse
11	F	67	—widow ..	Phthisis ..	6-9-99 20 K Queen's bldgs.
13	F	4 m.	Labourer's daugh. ..	Enteritis ..	9-9-99 Workhouse
14	M	34	Shopman ..	Heart disease ..	1-6-99 12 Crown street
14	F	69	Labourer's widow ..	Senile decay ..	23-1-96 36 Moon street
15	F	46	Engineer's widow ..	Pneumonia ..	14-9-99 131 Peel street
16	F	33	Labourer's wife ..	Phthisis ..	11-9-99 69 Thomas street

SUPPLEMENT TO TABLE VI.—*Continued.*

Date.	Sex.	Age	Occupation &c.	Cause of Death.	Date and Address of Deceased when admitted.
Sep. 16	M	65	Hawker	Abscess	11-7-99 32 Grange road
21	F	2 m.	Dom. serv. daugh.	Enteritis	4-8-99 Workhouse
22	M	48	Labourer.. ..	Phthisis	6-6-99 91 Vittoria street
24	M	37	do.	Sarcoma	31-8-98 W'house TrampShed
Oct. 2	M	89	Messenger	Senile decay	25-10-98 Home, Parkfield
1	M	71	Painter	Nephritis	22-8-99 5 Orderly place
5	M	66	Labourer.. ..	Heart disease	13-7-97 13 Oak street
5	M	23	do.	do.	26-9-99 75 Market street
9	M	38	Bricklayer	Phthisis	7-10-99 7 Holt hill
16	M	59	Baker	Cancer	20-6-99 21 Clayton street
23	M	78	Shipwright	do.	22-6-98 12 Waterloo place
23	F	67	Glass cutter's wid.	do.	3-7-99 31 Greenway road
24	M	12	Labourer's son ..	Peritonitis	20-9-97 32 St. Anne street
26	F	71	Tobacco spin. wid	Cancer	22-9-99 1 Roe street
28	F	42	Boatswain's wife	Enteric fever	25-10-99 91 Brook street
28	M	51	Marine engineer	Cer. hæmorrhage	4-4-99 103 Beckwith street
30	F	65	Labourer's widow	Bronchitis	27-10-99 163 Brook street
Nov. 2	F	82	do. do.	Senility	1-5-96 24 Back Portland st.
2	M	67	Labourer.. ..	Heart disease	1-7-99 3 Back Camden st.
4	F	79	Engineer's widow	Senile decay	12-10-99 Union Tramp Sheds
6	M	50	Joiner	Cancer	5-10-99 13 Sussex street
6	M	55	Brass finisher ..	Bronchitis	21-10-99 91 Brook street
7	F	15	Labourer's daugh.	Phthisis	13-9-99 91 Back Price street
9	M	43	Labourer.. ..	Brain disease	2-11-99 4 Orderly residence
8	M	58	do.	Bronchitis	11-6-97 43 Gildbrook
10	M	60	Shipwright	Apoplexy	22-9-99 30 Sun street
14	F	32	Coalheaver's wife	Heart disease	27-10-99 45 Frederick street
14	F	81	Porter's widow ..	Senile decay	21-9-99 110 Chester street
16	M	78	Labourer.. ..	do.	5-8-99 11 Queen's place
16	M	40	Plasterer	Aneurism	15-5-99 27 Queen's place
14	M	52	Labourer.. ..	Ulcer	14-11-99 393 Brook street
17	F	60	Policeman's wife	Heart disease	4-10-99 33 Wellesley street
17	M	38	Book-keeper	Tumour	6-10-99 17 Halcyon road
20	M	21	Labourer.. ..	Phthisis	28-9-99 2 Albion street
20	M	44	do.	Cancer	31-10-99 142 Chester street
20	M	66	do.	Apoplexy	30-8-99 12 Waterloo place
21	M	21	Trimmer	Enteric fever	11-11-99 1 h. 2 t. Payson st.
24	M	49	Boiler cleaner ..	Tumour	2-10-99 152 Oliver street
25	M	77	Labourer.. ..	Senile decay	28-7-98 4 Windsor street
27	M	74	Bricklayer	do.	1-2-95 3 Moon street
29	M	2	Labourer's son ..	Hydrocephalus	23-10-99 29 K Queen's bldgs.
30	F	72	do. wife	Senile decay	15-4-99 8 Payson street
Dec. 5	M	77	Engineer	do.	11-2-99 9 Ivy street
6	M	35	Fireman	Heart disease	10-11-99 99 Brook street
9	M	19	Assur. agent's son	Phthisis	10-10-93 50 Cobden street
12	M	38	Boilermaker	do.	16-9-99 115 St. Anne street
14	F	71	Tram driver's wid	Bronchitis	7-7-99 33 Clarendon street
18	M	36	Stone mason	Phthisis	13-11-99 41 Payson street
17	F	76	Plasterer's widow	Senile decay	30-8-99 16 Catherine street
19	F	80	Governess	do.	2-9-93 67 Peel street
21	F	72	Boilermaker's wid	Aneurism	12-8-99 45 Thomas street
24	F	60	Labourer's widow	Heart disease	25-3-99 Payson street

SUPPLEMENT TO TABLE VI.—*Continued.*

Date.	Sex.	Age	Occupation &c.	Cause of Death.	Date and Address of Deceased when admitted.	
Dec 25	F	60	Labourer's widow	Heart disease ..	20-12-99	35 Field street
25	F	66	Soldier's widow ..	Bronchitis ..	21-9-99	29 Blucher street
26	M	72	Painter	Nephritis ..	2-9-92	8 Eldon street
28	M	2 m.	Dom. servant's son	Pneumonia ..	24-11-99	15 Howson street
30	M	39	Fireman	Insanity ..	8-7-97	23 Greenfield street
30	F	79	Charwoman ..	Peritonitis ..	17-12-99	14 Wilkinson street
31	M	53	Boilermaker ..	Cancer	27-12-99	31 Leicester street
31	M	24	Labourer.. ..	Pneumonia ..	29-12-99	16 Eldon place
31	M	61	Fireman	Heart disease ..	17-11-99	10 h. 21 b. Fox st.

TABLE VII.

Description of those who Died during 1899.

Occupation, &c.	M.	F.	Son.	Daughter.	Wife.	Widow.
Accountant	1	..	..	2	1	..
Actor	1	..	..	..	..	1
Analytical chemist .. ..	..	..	..	..	1	..
Annuitant	6	..	..	1	..	..
Architect	2	..	..	..	1	..
Army pensioner	4	..	..	1	..	..
Asphalter .. ..	..	..	..	1	..	..
Assistant Overseer	1	..	..	..	..	1
Assurance agent	1	..	..	..	3	1
Assurance superintendent	1	..	..	1	..	..
Auctioneer .. ..	..	..	..	1	..	..
Baker	1	..	4	7	3	..
Baker's mauager .. ..	..	..	2	..	..	..
Barman .. ..	..	..	1	5	..	..
Billposting Co's manager .. ..	..	..	1	..	..	..
Blacksmith	5	..	2	3	3	7
Block and pump maker	1	..	..	..	..	..
Block and spar maker	1	..	..	..	..	..
Boatman	1	..	1	..	..	..
Boatswain .. ..	..	..	..	1	..	..
Boiler cleaner	1	..	1	5	1	..
Boiler maker	10	..	11	17	5	4
Bolt and nut maker .. ..	..	..	1	..	..	..
Bookbinder .. ..	..	..	..	1	..	..
Book keeper	5	..	2	3	4	2
Boot and shoe maker	10	..	4	4	3	2
Boot & shoe maker's manager .. ..	..	..	1	..	..	..
Brass moulder .. ..	..	..	1	..	..	..
Brass turner .. ..	..	..	1	1	..	..
Brewer .. ..	..	..	..	..	..	1
Brewer's cellarman	1	..	..	..	..	..
Brickburner .. ..	..	..	1	..	..	..
Bricklayer	4	..	4	1	2	1
Brickmaker	1	..	..	..	..	..
Builder .. ..	..	..	..	..	..	1
Building Inspector .. ..	..	..	..	1	..	..
Butcher	7	..	18	6	6	1
Cab driver	5	..	4	3	1	1
Cabinet maker .. ..	..	..	1	..	..	..
Camera maker .. ..	..	..	..	1	..	..
Canal superintendent .. ..	..	..	..	..	..	1
Candle maker .. ..	..	..	..	1	..	..
Candle packer .. ..	..	..	..	1	..	..
Caretaker .. ..	..	..	1	..	..	..
Carpenter .. ..	..	..	..	..	2	1
Car proprietor	1	1	1	2	..	..
Carter	9	..	23	19	8	1
Cart owner .. ..	..	..	..	1	1	..
Carver aud gilder .. ..	..	..	..	..	..	1
Cashier	1	..	1	1	..	2

TABLE VII.—*Continued.*

Occupation, &c.	M.	F.	Son.	Daughter.	Wife.	Widow.
Cattle drover .. ..	..	..	1	3	..	..
Cattle salesman .. ..	..	..	1	..	..	..
Cellarman .. ..	..	..	1	..	..	..
Charwoman .. ..	..	..	1	1	..	..
Chemist .. ..	..	..	..	..	..	1
Chipper and caulker .. ..	..	..	1	2	..	..
Civil engineer	1	..	..	..	..	..
Civil Service tutor .. ..	..	..	1	..	..	..
Clay pipe maker .. ..	..	..	..	..	..	1
Clerk	12	..	10	11	5	5
Clerk of works	1	..	..	..	..	..
Clothier .. ..	..	..	1	..	..	..
Coachman .. ..	..	..	1	2	2	1
Coach builder .. ..	..	..	1	1	..	1
Coach proprietor .. ..	..	..	..	1	..	..
Coal heaver	1	..	3	2	..	..
Coal merchant	6	..	1	3	1	..
Coal miner	2	..	..	..	..	..
Coal runner .. ..	..	..	1	..	..	..
Coal trimmer.. ..	1	..	1	..	..	..
Coffin maker	1	..	..	..	..	..
Coke dealer .. ..	..	..	1	..	..	..
Collector .. ..	..	..	1	..	..	1
Colliery proprietor's manager	1	..	..	..	..	..
Commercial agent	1	..	..	..	..	..
Commercial traveller	1	..	1	..	2	..
Commission agent	3	..	1	..	1	1
Compositor .. ..	..	..	1	3	1	..
Confectioner	1	..	..	1	..	..
Consulting accountant	1	..	..	..	..	..
Contractor .. ..	..	..	..	1	1	..
Cook .. ..	..	1	2	1	..	..
Cooper	2	..	..	..	..	1
Copper refiner .. ..	..	..	..	1	..	..
Coppersmith .. ..	..	..	2	2	2	..
Corn merchant	1	..	1	2	..	..
Corn miller .. ..	..	..	..	1	..	..
Cotton broker	1	..	..	..	..	..
Cotton salesman	1	..	..	..	..	..
Customs officer .. ..	..	..	..	..	..	1
Cycle works manager .. ..	..	..	..	1	..	..
Damask weaver .. ..	..	1	..	..	..	..
Dentist .. ..	..	..	..	1	..	..
Dock gateman	1	..	..	2	2	..
Doctor of laws .. ..	..	..	..	..	..	1
Domestic servant .. ..	..	8	4	2	..	..
Donkey engine driver	1	..	1	..	..	..
Draper .. ..	..	..	..	..	2	1
Draughtsman	1	..	1	..	..	..
Drayman .. ..	..	..	2	2	2	..

TABLE VII.—*Continued.*

Occupation, &c.	M.	F.	Son.	Daughter.	Wife.	Widow.
Dressmaker .. ..	..	2	1	..	..	..
Earthenware dealer .. ..	..	..	..	2	..	..
Engine cleaner	1	..	..	1	..	..
Engine driver.. ..	..	..	4	2	2	..
Engineer	9	..	9	4	2	2
Engine fitter	5	..	4	3	4	1
Engine greaser	1	..	..	..	..	..
Errand boy	1	..	..	..	..	..
Estate agent	3	..	..	..	1	..
Excise officer .. ..	..	..	..	..	1	..
Fancy ware dealer	1	..	..	..	..	..
Farmer	1	..	..	2	..	8
Ferry stageman .. ..	..	..	1	2	1	..
Ferry toll collector .. ..	..	..	..	..	..	1
File cutter	1	..	..	..	..	..
Fireman	3	..	16	7	4	2
Firewood dealer's manager..	1	..	..	..	..	..
Fish and poultry dealer ..	1	..	..	..	..	..
Fisherman .. ..	..	..	1	3	..	..
Fishmonger	1	..	..	1	1	..
Flatman	3	..	6	3	1	2
Flatowner's manager	1	..	..	..	..	..
Foreign correspondent ..	1	..	..	..	..	..
Forwarding agent	1	..	..	..	..	..
Fruit farmer .. ..	..	..	..	1	..	..
Furnace man .. ..	..	..	..	..	1	..
Furniture broker .. ..	..	..	..	..	2	..
Furniture remover .. ..	..	..	..	1	..	..
Game keeper .. ..	..	..	..	1	..	..
Gardener	7	..	4	4	1	6
Gas fitter	3	..	..	1	..	1
Gas inspector	1	..	..	..	..	..
General broker	1	..	..	..	..	..
General dealer	2	..	..	1	..	1
General merchant	1	..	..	1	1	2
General merchant's manager	1	..	..	..	..	..
Gentleman .. ..	..	..	..	1	..	..
Governess .. ..	..	1	..	..	..	..
Green grocer .. ..	..	..	..	4	1	..
Grocer.. ..	1	..	1	1	..	..
Groom .. ..	..	..	..	..	..	1
Hair dresser	2	..	2	3	2	..
Hardware dealer	1	..	..	..	..	..
Hatter	1	..	..	..	..	..
Hawker .. ..	..	1	..	2	..	..
Holder-up	4	..	1	1	2	1
Horse dealer	1	..	..	..	..	..
Horse keeper .. ..	..	..	..	..	1	1
Hotel manageress .. ..	..	..	..	1	..	..
House builder .. ..	..	..	..	..	1	2

TABLE VII.—*Continued.*

Occupation, &c.	M.	F.	Son.	Daughter.	Wife.	Widow.
House builder's merchant ..	2	..	..	..	..	..
House keeper ..	..	4	..	..	..	..
Housemaid and waitress ..	..	..	..	1	..	..
House owner ..	1	..	..	..	..	..
Hydraulic man ..	2	..	..	..	..	..
Insurance broker ..	1	..	..	..	..	..
Iron driller ..	1	..	7	9	4	..
Ironmonger ..	..	..	..	1	..	..
Ironmonger's manager ..	..	..	..	..	..	1
Iron moulder ..	2	..	2	1	..	2
Iron planer ..	1	..	..	..	..	..
Iron smith ..	..	..	1	..	..	..
Iron turner ..	2	..	5	..	..	1
Jeweller ..	1	..	..	..	..	1
Joiner ..	14	..	8	12	5	6
Labourer ..	83	..	160	140	51	22
Lamp-lighter ..	1	..	..	1	..	..
Land agent ..	..	..	..	1	..	..
Laundress ..	..	1	2	..	..	..
Laundry ironer ..	..	1	..	..	..	..
Laundry proprietor ..	..	..	..	1	..	..
Leather merchant ..	..	..	..	1	..	..
Licensed victualler ..	11	..	8	6	1	4
Licensed vict. manager ..	2	..	..	..	..	..
Lithograph printer ..	..	..	1	..	..	..
Machinist ..	..	..	1	..	..	1
Marble polisher ..	1	..	..	..	..	..
Marine store dealer ..	1	..	..	..	..	..
Marine superintendent ..	1	..	..	..	..	1
Market gardener ..	..	..	..	..	1	..
Master butcher ..	1	..	..	..	..	..
„ carter ..	2	..	..	..	..	..
„ joiner ..	..	..	..	2	..	..
„ mariner ..	2	..	1	1	2	4
„ plumber ..	1	..	..	..	..	..
„ shipbuilder ..	1	..	..	..	..	..
„ tailor ..	1	..	..	..	..	..
„ watchmaker ..	1	..	..	..	..	..
Meat inspector ..	1	..	..	..	..	..
Meat salesman ..	2	..	1	..	..	..
Medical practitioner ..	..	..	..	1	..	..
Messenger ..	2	..	..	..	..	..
Metal planer ..	1	..	..	..	..	..
Milk purveyor ..	2	1	1	2	1	..
Milliner ..	..	1	..	..	..	..
Mineral water bottler ..	..	..	..	..	1	..
Mineral water salesman ..	1	..	..	..	..	..
Minister ..	1	..	2	2	..	..
Musician ..	..	..	..	1	..	..
Naval gun instructor ..	..	..	..	..	..	1

TABLE VII.—*Continued.*

Occupation, &c.	M.	F.	Son.	Daughter.	Wife.	Widow.
Naval pensioner	3	..	..	..	5	..
News agent	2	1	..	1	..	..
Nurse .. ..	..	3	..	..	..	..
Nurseryman .. ..	..	..	..	..	..	1
Occupation unknown ..	1	3	8	5	..	..
Of independent means ..	..	2	..	..	..	..
Of no occupation	1	..	..	..	..	..
Packman .. ..	..	..	..	..	..	1
Painter	8	..	7	7	5	1
Paper bag manufacturer ..	..	..	1	..	..	..
Pattern maker .. ..	..	..	2	3	2	..
Pavior .. ..	..	..	1	..	1	..
Paymaster .. ..	..	..	..	..	..	1
Picture frame maker .. ..	..	..	1	1	..	..
Pilotage superintendent ..	..	..	..	..	1	..
Plasterer .. ..	..	..	4	1	..	..
Platelayr .. ..	..	..	1	..	1	..
Plumber	1	..	2	5	1	..
Police detective .. ..	..	..	1	1	..	..
Police inspector .. ..	..	..	1	..	..	..
Policeman .. ..	..	..	6	3	2	..
Political club manager ..	..	..	..	1	..	..
Pork butcher .. ..	..	..	..	..	..	1
Porter	10	..	6	3	2	1
Postal telegraph supervisor..	1	..	..	..	..	..
Postman .. ..	..	..	..	3	..	..
Poultry dealer .. ..	..	..	..	..	1	..
Printer .. ..	..	..	1	3	..	1
Printer and stationer ..	..	..	..	..	1	..
Property owner .. ..	..	..	..	..	..	1
Property repairer	1	..	..	..	..	..
Provision merchant .. ..	..	..	..	1	..	..
Rag gatherer	1	..	..	..	..	..
Railway agent .. ..	..	..	..	1	..	..
Railway servant	14	..	22	27	8	3
Rate collector .. ..	..	..	1	..	..	..
Refreshment house keeper ..	..	..	2	..	..	..
Refreshment house assistant	1	..	..	..	..	..
Registrar of marriages ..	..	..	1	..	..	..
Reformatory ship boy ..	1	..	..	..	..	..
Retired agr. imp. mak. m'ger	1	..	..	..	..	..
.. bank clerk	1	..	..	..	..	..
.. bank manager .. ..	..	..	..	..	1	..
.. book keeper	1	..	..	..	..	..
.. brick & tile merchant ..	..	..	..	..	..	1
.. chemical broker	1	..	..	..	..	..
.. clerk	1	..	..	..	..	..
.. commercial traveller ..	..	..	..	..	..	1
.. cotton broker	2	..	..	..	..	..
.. customs officer .. ..	..	..	..	..	1	..

TABLE VII.— *Continued.*

Occupation, &c.	M.	F.	Son.	Daughter.	Wife.	Widow.
Retired customs surveyor	1	..	..	..	..	..
„ emigration agent ..	..	..	..	..	1	..
„ enginesmith ..	1	..	..	..	..	..
„ fancy ware dealer ..	..	..	..	..	..	1
„ farmer ..	1	..	..	..	..	..
„ flat owner ..	1	..	..	1	..	..
„ general broker ..	1	..	..	..	..	..
„ general dealer ..	..	..	..	..	1	..
„ general merchant ..	2	..	..	..	..	..
„ greengrocer ..	1	..	..	..	..	..
„ horsekeeper ..	1	..	..	..	..	..
„ journalist ..	..	..	..	..	..	1
„ master baker ..	1	..	..	..	..	..
„ master mariner ..	3	..	..	..	2	..
„ mechanical engineer	1	..	..	..	..	..
„ minister ..	1	..	..	..	..	1
„ oil mills manager ..	1	..	..	..	..	..
„ printer ..	1	..	..	..	..	..
„ provision merchant	..	..	..	1	..	..
„ railway goods supt..	1	..	..	..	..	..
„ seaman ..	..	..	..	1	..	..
„ ship broker ..	..	..	..	1	..	..
„ ship owner ..	..	..	..	..	1	..
„ solicitor ..	..	..	..	..	..	1
„ storekeeper ..	1	..	..	..	..	..
„ tea merchant ..	1	..	..	..	..	..
Rivet heater ..	1	..	..	..	..	..
Rivetter ..	1	..	3	2	..	..
Road foreman ..	1	..	2	..	..	..
Sack merchant ..	..	..	1	..	..	..
Saddler ..	..	..	..	..	..	1
Sail maker ..	..	..	..	..	1	1
Sanitary inspector ..	..	..	1	..	..	..
Sawyer ..	..	..	..	..	..	1
Scaffolder ..	1	..	..	..	..	..
School board visitor..	..	..	..	1	..	..
School master ..	..	..	1	3	1	2
Seaman ..	9	..	18	19	4	5
Seamstress ..	..	1	..	..	..	..
Secoud-hand clothes dealer	1	..	..	..	..	..
Servant ..	..	..	9	13	..	..
Sewing machine canvasser ..	..	..	1	..	1	..
„ salesman ..	..	..	..	1	..	..
Shandryman ..	..	..	1	..	..	..
Shepherd ..	..	..	..	..	..	1
Ship builder ..	..	..	..	..	..	1
Ship owner ..	1	..	..	..	..	..
Ship plater ..	3	..	3	2	..	..
Ship rigger ..	2	..	2	1	5	1
Ship's cook ..	1	..	1	..	1	..

TABLE VII.—*Continued.*

Occupation, &c.	M.	F.	Son.	Daughter.	Wife.	Widow.
Ship smith .. ..	..	..	..	1	..	2
Ship steward	2	..	6	1	1	3
Shipwright	6	..	5	3	8	4
Shop assistant	2	1	4	2	..	1
Shop boy	1	..	..	..	..	..
Silk weaver .. ..	..	..	..	..	..	1
Slater	1	..	..	..	..	1
Soldier .. ..	..	..	..	..	..	1
Solicitor	2	..	1	..	..	..
Stationer .. ..	..	..	1	..	..	..
Steam crane driver ..	..	..	1	1	..	..
Stevedore	1	..	1	..	..	..
Stock and share broker	1	..	..	..	..	..
Stock broker	1	..	..	..	..	..
Stoker	1	..	3	3	1	..
Stone breaker	2	..	..	..	..	..
Stone mason .. ..	..	..	2	..	..	3
Stone quarrier	2	..	..	1	..	1
Store keeper	1	..	1	..	1	1
Striker	1	..	1	1	1	1
Super. assist. overseer	..	..	..	..	1	..
Superannuated pol. constable	..	..	..	..	..	1
Superannuated shore steward	..	..	..	..	1	..
Tailor	2	..	2	4	3	2
Team owner	1	..	1	2	..	..
Tea salesman .. ..	..	..	1	..	..	..
Theatre biller and checker ..	1	..	..	..	..	..
Timber buyer .. ..	..	..	..	..	..	1
Timber merchant .. ..	..	..	1	1	..	..
Time keeper	1	..	..	..	..	..
Tinsmith	3	..	..	..	1	..
Tobacconist	1	..	..	..	..	..
Tobacco spinner .. ..	..	..	1	..	..	..
Tool dealer	1	..	..	..	..	..
Tool grinder .. ..	..	..	..	..	1	..
Trades union secretary ..	..	..	..	1	..	..
Tramcar driver .. ..	..	..	2	2	..	..
Traveller .. ..	..	..	1	2	..	..
Tripe dresser	1	..	..	..	..	1
Tug boat captain .. ..	..	..	..	..	..	1
Upholsterer .. ..	..	..	..	1	1	..
Van driver	1	..	1	..	..	..
Vanman	1	..	1	..	1	..
Vet'inary surgeon's assistant	1	..	..	..	..	..
Violin teacher .. ..	..	..	..	..	..	1
Vocalist .. ..	..	..	..	1	..	..
Waiter .. ..	..	..	..	1	..	..
Warehouse keeper	1	..	..	2	..	1
Warehouseman	2	..	2	2	1	2
Warehouse owner .. ..	..	..	..	..	..	1

TABLE VII.—*Continued.*

Occupation, &c.	M.	F.	Son.	Daughter.	Wife.	Widow.
Watchmaker	1	..	1	..	..	..
Watchman	8	..	2	..	1	..
Water inspector .. ..	..	..	2	..	1	..
Waterman	2	..	..	5	..	..
Weighing machine fitter .. ..	..	..	1	..	..	..
Weighing machine keeper .. ..	..	..	..	..	1	..
West coast merchant	1	..	..	..	..	..
Wharfinger .. ..	..	..	..	..	1	..
Wheelwright .. ..	..	..	..	3	..	1
Whitesmith .. ..	..	..	1	..	1	..
Wine bottle washer	1	..	..	..	..	..
Wine merchant	1	..	..	1	..	..
Wine salesman .. ..	..	..	..	..	1	..
Wood sawyer .. ..	..	..	2	..	..	1
Wood turner .. ..	..	..	1	..	..	..
Woollen cloth merchant	1	..	..	..	..	..
Yacht club steward	1	..	..	..	..	..

